An Assessment of Beverage-Related Policies Among Organizations in a Multi-Sector Community Coalition

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Keywords: beverage policy; sugary-beverage consumption; obesity; public health.

Executive Summary: Growing Healthy Kids Columbus (GHKC), a childhood obesity prevention coalition, has focused on promoting the "Water First for Thirst" message since 2013. Coalition members were asked to complete a survey at the start of both 2014 and 2015 on the beverage-related policies and practices in place at their organizations during the previous year. Representatives from 28 organizations in 2014 and 25 in 2015 completed the survey for response rates of 74% and 52%, respectively. Almost all organizations made drinking water freely available to the people they served in both years. Furthermore, organizations promoted water as the healthy beverage choice through the use of posters, brochures, pictures, social media, and commercials. However, most organizations lacked standards or policies for beverage vending; serving beverages at meetings, celebrations or events; or limiting the advertisement or endorsement of sugar-sweetened beverages. The lack of policies suggests ample opportunity for the coalition to provide technical assistance to its member organizations in policy development and implementation.

I. Background

Decreasing consumption of sugar sweetened beverages (SSBs) is a recommended strategy for reducing childhood obesity (Wang, Bleich, and Gortmaker 2008). The Centers for Disease Control and Prevention (CDC) urges communities to discourage the consumption of SSBs, suggesting that schools, childcare centers, and other community organizations ban SSBs and limit portion sizes of 100% juice (Khan et al. 2009). Nearly two decades ago, Ludwig, Peterson, and Gortmaker (2001) demonstrated a relationship between childhood obesity and SSB consumption. In this study, a child's likelihood of developing obesity increased by 60% with each additional SSB consumed per day. Research has also shown that consuming SSBs in place of water can contribute to obesity by adding up to 235 calories per day in the average child's diet (Wang et al. 2009). As such, increasing access to

drinking water can help combat obesity by making water consumption an easy choice, thereby decreasing added sugars in the diet. This type of intervention and other policy, systems, and environmental change (PSEC) strategies can reach larger numbers of people on a more cost-effective basis than approaches that attempt to change individual behavior. Additionally, PSEC strategies may have more widespread and lasting effects as changes to the environment are assimilated into policies, systems, and cultural norms (Larson and Story 2009).

Grounded in the Health Impact Pyramid (Frieden 2010), PSEC examines the policies, systems, and environments that impact behavior and modifies them as necessary to make healthy choices the easy choices for individuals and communities (Bunnell et al. 2012). It is based on the idea that people cannot make healthy decisions unless presented with realistic, healthful options from which to choose. In

the past two decades, many health promotion coalitions have used PSEC strategies to impact the health of individuals and communities with support from the CDC and large organizations such as the Robert Wood Johnson Foundation, Nemours, the W.K. Kellogg Foundation, and the California Endowment (Herman et al. 2011). Coalitions accomplish PSEC by mobilizing communities and engaging a wide variety of people in issues that affect health (Roussos and Fawcett 2000). Community mobilization efforts occur at multiple levels and in multiple sectors of the community individuals. families. organizations. involving businesses, and institutions. There is growing evidence that some of the most cost-effective approaches to childhood obesity prevention involve interventions within organizations, schools, supported by state and local public health agencies (Blanck and Kim 2012).

In May 2009, The Growing Healthy Kids Columbus (GHKC) coalition was established with funding from the Ohio Department of Health to develop an early childhood obesity prevention plan. The goal of the resulting publication, the City of Columbus Early Childhood Obesity Prevention Plan (ECOPP), is to increase the proportion of Columbus children entering kindergarten at a healthy weight. As such, GHKC is comprised of representatives from organizations or programs that serve pregnant women and young children. Childhood obesity prevention strategies addressed by ECOPP include healthful increasing access to foods and opportunities for daily physical activity for pregnant women and young children, as well as increasing the initiation and duration of breastfeeding for infants. The coalition holds monthly meetings for members to share information, plan intervention strategies, and report on activities conducted to further the goal of ECOPP. Throughout 2013, 130 individuals representing over 40 organizations took part in the coalition, either by attending meetings or by regularly receiving information from the coalition.

In 2013 and 2014, GHKC focused on engaging in the "Water First for Thirst" campaign that was developed by the Columbus Public Health (CPH) department to make water the easy, appealing, first beverage choice for children and families, contributing to healthy weight in young children. Coalition members were encouraged to promote the "Water First for Thirst" message using the signs, posters, and other messaging materials available on

the CPH website. They were also encouraged to support the message with PSEC strategies such as organizational commitments to make water freely available to employees and clients; vending machine contracts that make water cheaper than SSBs and/or restrict the sale of SSBs; and restrictions on ads, logos, grant monies and funding opportunities that support beverage companies.

II. Objective

While the goal of GHKC is to reduce childhood obesity by building a community in which all children have daily opportunities for active play and access to nutritious foods, little is known about the types of policies and practices of the coalition organizations related to youth food and beverages consumption. The purpose of this study was to assess the beverage-related policies and practices in place in 2013 and 2014 at organizations affiliated with GHKC.

III. Methods

Individuals representing organizations that took part in GHKC in 2013 or 2014 were eligible to participate in the study. Coalition participation was defined as attending monthly coalition meetings and/or receiving emails about the monthly meetings and activities. The research team identified one key contact from each organization on the GHKC email list (n=38 in 2014, n=48 in 2015), to which the coalition leader sent an introductory email. The research team followed the introductory email with an invitation email containing a link to an online survey on the beverage-related practices and policies in place at organizations throughout the previous year, followed by up to three reminders emailed at weekly intervals to non-respondents. Survey protocols were approved by the Institutional Review Board at The Ohio State University. Survey responses were analyzed using frequency statistics at the group level. General survey trends are described below. Direct comparisons between the 2014 and 2015 survey results were not possible because this was a cross-sectional survey, and respondents were not required to disclose their name or affiliation.

IV. Results



Figure 1: Beverages Served at Meetings, Celebrations and Special Events

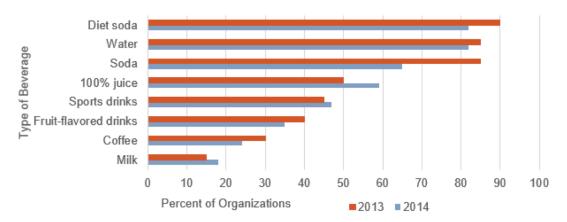


Figure 2: Beverages Available for Purchase

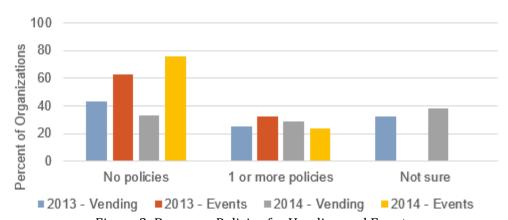


Figure 3: Beverage Policies for Vending and Events

Representatives from the local health department, local school district, early childcare centers, local businesses and a variety of non-profit organizations completed the survey. The response rates to the survey were 74% and 52% in 2014 and 2015, respectively. Respondents provided information on the beverage-related policies and practices in place in their organizations including those related to

beverage availability, accessibility, promotion and advertising.

Over 90% of organizations made drinking water freely available at all times to the people they served in 2013 and 2014, and all organizations served water at meetings, celebrations, and special events (Figure 1). Sources of free drinking water included water fountains, tap water from faucets and pitchers,

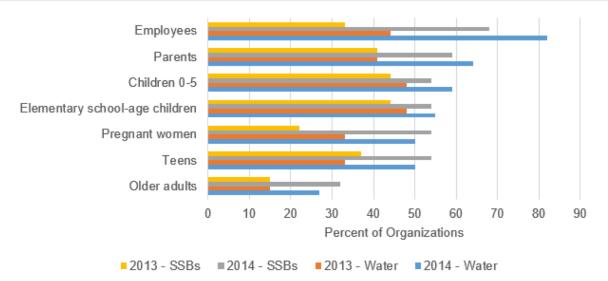


Figure 4: Groups Targeted with Outreach Efforts to Increase Water Intake and Decrease SSB Intake

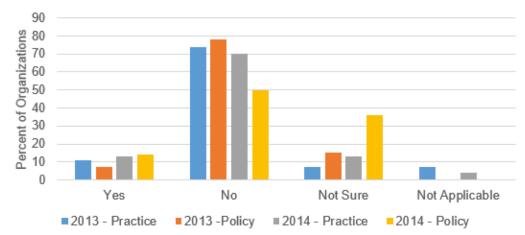


Figure 5: "Do you advertise or endorse SSBs?" and "Do you have a policy limiting the advertisement or endorsement of SSBs?"

and bottled water. Beverages were also available for purchase at most of the organizations (Figure 2). In 2014, 72% of organizations had vending machines available in their buildings or on their property. Most vending machines (61%) were accessible to customers and/or the general public in addition to staff and professional visitors while just over a third (39%) were accessible only to staff and professional visitors. Less than 30% of organizations reported standards or policies for beverage vending or for serving beverages at meetings, celebrations, or events (Figure 3). Among those organizations with vending policies, they most often pertained to stocking, pricing, and vending machine location.

Organizations promoted water consumption in 2013 and 2014 through the use of posters,

brochures, pictures, social media, and commercials. Groups that were targeted with specific efforts to increase water intake and reduce SSB intake included children up to age five, elementary school children, teenagers, pregnant women, parents, adults, and employees (Figure 4). While most organizations (over 70%) did not advertise or endorse SSBs in their print materials and other media in 2013 or 2014, less than 15% of organizations had written policies, standards, or guidelines limiting the advertisement or endorsement of these items (Figure 5).

V. Discussion

In both 2013 and 2014, after adopting the "Water First for Thirst" message and engaging in the "Water First for Thirst" campaign, organizations affiliated with GHKC targeted a variety of demographic groups with specific efforts to decrease SSB consumption and increase water consumption. In 2014, employees were the top group targeted with outreach efforts, which could reflect the growing worksite popularity of wellness programs. Employers are beginning to realize that the workplace can serve as a setting to promote health, given the amount of time that most workers spend at their jobs (Commission for a Healthier America 2008). The CDC recommends that employers interested in workplace wellness initiatives implement a comprehensive set of strategies to address employee health and safety, including PSEC strategies (Centers for Disease Control and Prevention, 2013). In contrast to individual-level behavior change interventions, PSEC strategies are able to reach most if not all of the employees at a worksite simultaneously. For businesses and other public institutions, PSEC strategies can also positively affect the individuals that an organization Organizations can establish promoting social norms by modeling healthful choices and offering healthful food and beverage selections to their employees and clients at meetings, celebrations and events.

At the same time that organizations reported promoting water as the healthy beverage choice, most lacked policies to ensure that water was consistently made the easy, appealing, first beverage choice. Less than one-third of the organizations that responded to the survey had written policies, standards, or guidelines related to serving beverages at meetings, celebrations, and special events, even though almost all organizations made drinking water freely available to the people they served, and less than half served SSBS at events. Similarly, less than 15% of the organizations had written policies, standards, or guidelines limiting the advertisement or endorsement of SSBs, even though most organizations did not advertise SSBs, endorse SSBs, or receive support from companies that market SSBs.

Many barriers may prevent organizations from attempting to implement food and beverage policies,

despite their desire to make healthy choices more available and affordable to community members. For example, a study on organizational capacity for providing healthy food environments in recreation and sport facilities in British Columbia, Canada revealed the following obstacles to food policy development: facilities locked into existing vending contracts, lack of cooperation or willingness by vendors to make changes, the monitoring required to ensure that machines are correctly stocked with healthy choices, healthy items not being purchased by customers, and lower profit margins on healthy products (Naylor, Olstad, and Therrien 2015). These barriers and others, whether real or perceived, may prevent organizations from attempting to reinforce the changes made through the "Water First for Thirst" campaign with organizational policies and standards.

VI. Implications

While most GHKC organizations offer access to free drinking water and promote the "Water First for Thirst" message in a variety of ways, few organizations have policies in place to discourage SSB consumption and reinforce the "Water First for Thirst" message. Thus, there is ample opportunity for the coalition to provide its member organizations with technical assistance in policy development and implementation. It may be beneficial for the coalition to further explore the barriers and challenges that its member organizations face when attempting to implement policy. The size and diversity of the GHKC coalition is such that member organizations without policies in place may learn from those with policies pertaining to vending machine pricing, stocking, and location; beverages permitted at meetings and events; and the advertisement or endorsement of SSBs. Additionally, coalition members may be able to share resources and/or provide technical assistance from their organizations to help all members develop and implement healthy beverage policies. Specifically, the coalition facilitators could visit GHKC member organizations and provide hands-on assistance with policy development and implementation.

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Author Biographies

Jennifer Lobb, MPH, RD, LD, is a recent graduate of the Masters' of Public Health program at The Ohio State University. She is currently working as a Research Associate on a childhood obesity prevention project for Ohio State University Extension. Jennifer is also a Registered Dietitian who earned her Bachelor's of Science in Human Nutrition from The Ohio State University and completed a dietetic internship at Mount Carmel College of Nursing in Columbus, Ohio. She is currently involved with multiple community groups that are exploring public health approaches to address obesity and food security, including the Growing Healthy Kids Columbus coalition and the Franklin County Local Food Council.

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Ellen R. Hashiguchi will complete a combined MS in Nutrition & Wellness and Dietetic Internship from Benedictine University in December 2015. She holds an MPH. from the Northwest Ohio Consortium for Public Heath, a BA in Strategic Communication and a Didactic Program in Dietetics-- both from The Ohio State University. Ellen is interested in working as a clinical dietitian and plans to obtain her certification in diabetes education following graduation.