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Attitudes and Practices of Virginia EFNEP and FSNE Educators Toward Teaching About Childhood Overweight

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Abstract

The main objective of the study reported here was to assess the attitudes, practices, and needs of Virginia EFNEP and FSNE educators toward addressing childhood overweight. Written questionnaires were administered to 40 educators. Nearly 80% considered childhood overweight a "growing problem"; however, only 12 indicated they had taught classes on childhood overweight and nearly one-third were considered in pre-contemplation or contemplation (based on Stages of Change). The biggest perceived barrier was lack of resources and information, followed by lack of interest of class participants. The findings demonstrate the need for curricula and a stage-based training on childhood overweight for Extension.

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Introduction

Nationwide data show that overweight has increased two to three times among American youth in the past 30 years (Ogden, Flegal, Carroll, & Johnson, 2002). Currently, nearly one-third (31.0%) of children and adolescents are at risk for overweight or overweight, with 16.0% considered overweight (Hedley, Ogden, Johnson, Carroll, Curtin, & Flegal, 2004). Children who are overweight are more likely to suffer from high blood pressure, high cholesterol, Type 2 diabetes, asthma, sleep problems, as well as lower self-esteem (Dietz, 1998a; Dietz, 1998b; Simic, 1983; Strauss & Pollack, 2001; Whitaker, Wright, Pepe, Seidel, & Dietz, 1997).

Several studies have shown that disparities exist based on ethnicity and race, with Hispanics/Latinos, Native American Indians, and blacks typically having higher rates than their non-Hispanic white counterparts (Hedley et al., 2004; Ogden et al., 2002; Rosner, Prineas, Loggie, & Daniels, 1998; Strauss & Pollack, 2001; Troiano & Flegal, 1998). These groups generally have higher rates of poverty as well (Proctor & Dalaker, 2003).

The Expanded Food and Nutrition Education Program (EFNEP) and Food Stamp Nutrition Education (FSNE) provide nutrition education to "at-risk" or limited resource audiences. Both programs stand well-positioned to address the overweight problem, considering their long-standing success in affecting and improving health-related behaviors through cost-effective methods (Anding, Fletcher, Van Laanen, & Supak, 2001; Cox, White, & Gaylord, 2003; Del Tredici, Joy, Omelich, & Laughlin, 1988; Rajgopal, Cox, Lambur, & Lewis, 2002), and Extension's overall capacity to employ education and skill-building (Robinson, 2004).

These programs also have extensive experience working with "at risk" audiences. EFNEP is designed to "assist limited resource audiences in acquiring the knowledge, skills, attitudes, and changed behavior necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being (USDA

Cooperative State, 2004)." It accomplishes this by delivering educational programs through a variety of techniques, primarily in groups, by paraprofessionals or "peers" who represent the communities where they work. FSNE has similar nutrition-related goals to EFNEP, however it specifically targets food stamp recipients (US Department of Agriculture, 2004).

In Virginia, the state program office is responsible for reviewing and purchasing all curricula and related educational resources, such as videos and handouts, for EFNEP and FSNE educators, along with coordinating statewide trainings. While the vast majority of EFNEP and FSNE educators use only a few standard curricula, they have a great deal of flexibility in choosing supplemental resources in order to tailor the curricula to the needs of their class participants.

At the time of the study reported here, there were no curricula in place on childhood overweight; however, there were several handouts and related materials on childhood overweight. Given the increasing number of overweight youth in Virginia and nationally, the aim of the study was to assess the attitudes, practices, and perceived needs of Virginia EFNEP and FSNE educators toward addressing childhood overweight. Results will be used to guide the content of future statewide trainings and to help adapt or develop a curriculum on childhood overweight.

Methodology

Short, written questionnaires were administered to 40 Extension Food and Nutrition Education Program (EFNEP) and Food Stamp Nutrition Education (FSNE) educators (both carry the title of program assistants) in Virginia prior to district meetings and/or trainings. The lead researcher provided verbal instructions during the time that the instrument was completed. The instrument required approximately 10-15 minutes to complete.

The instrument contained a combination of open- and closed-ended questions (as illustrated below) regarding:

- Appointment (EFNEP, FSNE, or combined) (closed);
- Adult or youth focus (closed);
- Duration of employment as an Extension educator (open);
- Perceived prevalence and extent of childhood overweight (closed);
- Frequency of questions about childhood overweight (closed);
- Current level of teaching related to childhood overweight, based on the Stages of Change Theory, also called the Transtheoretical Model (Prochaska, Velicer, DiClemente, & Fava, 1988) (closed)
- Topics covered when addressing childhood overweight (open);
- Barriers to teaching about childhood overweight (closed and open); and
- Topics and audiences of interest for future Extension programs (closed and open)

Responses to questions about current level of teaching about childhood overweight were classified into the following stages:

- Pre-contemplation: the educator has no intention of covering childhood overweight in classes;
- Contemplation: the educator has thought about starting to address the issue;
- Preparation: the educator is taking steps to teach about this topic;
- Action: the educator has taught classes on overweight (but for less than 6 months)
- Maintenance: the educator has already been covering childhood overweight in classes for at least 6 months

There were three questions that requested ranking of responses: Why haven't you taught classes that cover issues related to childhood obesity? Which of the following topics for lesson plans would you like us to develop? And which of the following audiences should the lesson plans be developed for? For these responses, frequencies were calculated for the number of times that a response was ranked first, second, or third.

Descriptive statistics were calculated for all questions. One-way analysis of variance (ANOVA) was conducted with stages of change as the dependent variable and district, appointment, barriers, topics, and audiences as (separate) independent variables. Results were summarized and analyzed using SPSS™ software and MS Excel.™

Respondents were not asked to provide their names on the questionnaire to ensure anonymity. Participation was voluntary; all educators attending the meetings chose to participate, although some preferred not to answer some of the questions (as shown by unreported data).

Results

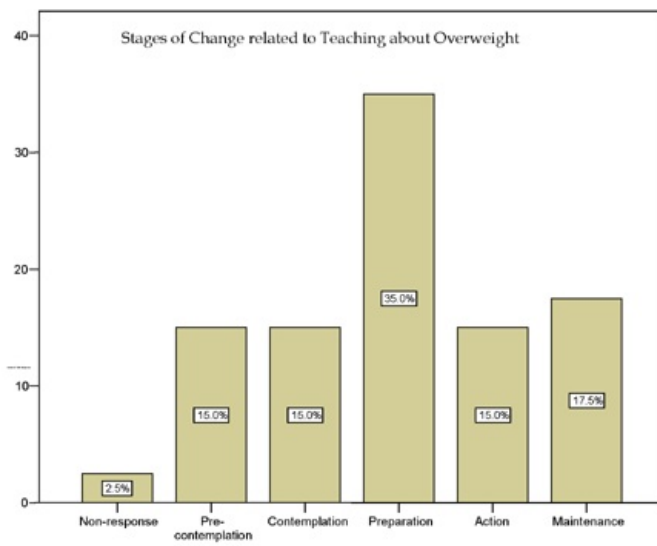
Ten of the respondents were funded entirely by EFNEP and 22 by FSNE, with the remainder having joint appointments (Table 1). Participants had an average of 6.8 years of experience with Virginia Cooperative Extension. Of the respondents, 80.5% of the educators considered childhood overweight a "growing problem" in their communities, with the remainder classifying it as a "big" problem. Over half of the educators reported receiving questions from clients or the public about it.

Twelve educators (30.0%) indicated that they had taught classes on childhood overweight, with three-quarters of them having partial or full funding from FSNE. Of the educators that had not taught classes on this topic, 25 reported that they had "thought" about it. Half of the educators were classified in the "preparation" stage and six in "maintenance" (Figure 1).

Table 1.
Characteristics of Respondents (n=40)

Characteristic	N	% (N)
Gender		
Male	1	2.5
Female	39	97.5
Funding		
EFNEP (100%)	10	25.0
FSNE (100%)	22	55.0
Combined EFNEP/FSNE	8	20.0
Stage in Teaching about Childhood Overweight		
Pre-contemplation	6	15.4
Contemplation	6	15.4
Preparation	14	35.9
Action	6	15.4
Maintenance	7	17.9
Total	40	100.0
<i>*Percentages do not include non-responses</i>		

Figure 1.
Stages of Change (n=40)



The biggest reason for not teaching classes was lack of resources and information. Not only was this response ranked first in 75% of responses, but it also received the most rankings in the top three (Table 2). The other responses, lack of interest of class participants, lack of time, importance of other topics, and feeling uncomfortable about talking about the subject, received comparable rankings overall, followed by perceived lack of interest of class participants (12.5%), lack of time (4.2%), importance of other topics (4.2%), and feeling uncomfortable talking about it (4.2%). None of the educators indicated that they were not interested in teaching classes about the topic.

Educators were most likely to rank portion sizes, buying food at fast food restaurants, and beverages as the most important topics to address in a childhood overweight curriculum. These were followed by media and food, weight maintenance, physical activity, and exercise. Other ranked responses included body image, body size acceptance, fat intake, television, and media body image; however they received fewer than five rankings each in the top three.

In terms of target audiences for the curriculum, educators overwhelmingly ranked parents as the most important audience, followed by children, grandparents raising grandchildren, and childcare providers.

Table 2.
Barriers and Recommendations to Implementing Programs on Childhood Overweight

	N (%) of Top Rank¹	N (%) of 2nd Rank¹	N (%) of 3rd Rank¹	Mean Rank²
Barriers to Teaching About Overweight (rank 1 - 6)³				
Not enough resources & information	18 (75.0)	4 (40.0)	0	1.1
Class participants are not interested	3 (12.5)	2 (20.0)	5 (62.5)	2.2
Not enough time	1 (4.2)	1 (10.0)	2 (25.0)	2.0
Other topics more important	1 (4.2)	1 (12.5)	1 (12.5)	2.0
Do not feel comfortable	1 (4.2)	2 (20.0)	0	1.7
Recommendations for Curricula Topics (rank 1 - 5)				
Portion sizes	9 (34.6)	1 (3.8)	3 (11.5)	2.3

Buying food at fast food restaurants	6 (23.1)	6 (23.1)	2 (7.7)	2.5
Beverages (soda, water)	4 (15.4)	0	5 (19.2)	4.0
Weight maintenance	1 (3.8)	3 (11.5)	2 (7.7)	3.0
Physical activity and exercise	1 (3.8)	3 (11.5)	4 (15.4)	3.4
Media and food	0	4 (15.4)	2 (7.7)	2.6
Recommended Target Audiences for Curricula (rank 1 - 3)				
Parents	24 (80.0)	4 (13.3)	0	1.1
Children	5 (16.7)	11 (36.7)	3 (10.0)	1.8
Grandparents	1 (3.3)	10 (33.3)	9 (30.0)	2.4
Childcare providers	0	5 (16.7)	18 (60.0)	2.7
¹ Percentages based on total responses. Only the top responses are shown here.				
² Mean rank is determined for that item alone and does not take into account different responses. For curricula, 1 is the highest rank and 5 the lowest; for target audiences, 3 is the lowest.				
³ Individuals classified in the action or maintenance stages did not respond to this question.				

Stages of change were not significantly associated with appointment type, geographic location, perceived barrier, requested curricula topics, and audiences. Further, topics and audiences were not correlated to appointment or geographic location of respondent.

Discussion

The majority of respondents felt that childhood overweight was a problem in their communities. Despite this fact, fewer than one-third had ever taught or covered the issue in their classes. For those who had not covered the topic yet, responses were mixed between being resistant to the topic (in contemplation) and receptive to it (in preparation).

These findings, although not entirely surprising, point to the need for appropriate resources, information, and curricula on childhood overweight--particularly those targeting parents and children--for Extension para-professionals and professionals to use with their clientele. The results also highlight the need for training for Extension educators that not only covers content information, but integrates and evaluates the different stages of change and helps improve self-efficacy in addressing childhood overweight. Research has demonstrated that educational interventions tailored to an individual's stage of change can help initiate movement through the stages and possibly elicit behavior change (Finckenor & Byrd-Bredbenner, 2000; Peterson & Hughes, 2002).

Additional research is also warranted on the Stages of Change theory, as related to educators. While a plethora of studies have investigated the role of this theory in behavior change, few studies have investigated the function of this theory in promoting the adoption and implementation of new curricula or new educational topics among teachers.

There are a few limitations with this study. First, the survey was administered among educators in Virginia and therefore is not necessarily representative of issues and concerns of educators located in other states or other organizations. Nevertheless, given the timeliness of this topic and the fact that many state EFNEP and FSNE programs share and utilize common educational curricula and training materials, the findings presented here certainly document a gap. Second, the questionnaire did not provide a definition of "childhood overweight." As a result, the educators'

responses were based on their own personal perception of what constituted "teaching about childhood overweight," not to mention what materials were available, which may not have been uniform across all educators.


Furthermore, knowledge, skills, and attitudes toward preventing childhood overweight were not investigated. While the mean ranks are reported here, they do not necessarily reflect overall rank, as they do not take into consideration other responses. Finally, the study was designed to be exploratory. The questionnaire was short, and the data collected mostly subjective and qualitative in nature.

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