Ohio’s infant mortality rate is 7.4, ranking Ohio 45th in the nation. Birth defects, low birthweight, maternal pregnancy complications, and Sudden Infant Death Syndrome are several causes of infant mortality. Maternal nutrition during pregnancy can play a role in preventing these causes of infant mortality. In fiscal year 2015, Ohio EFNEP served 304 pregnant women and teens, impacting 1,204 family members. In fiscal year 2016, Ohio EFNEP served 251 pregnant women and teens.

Ohio EFNEP is funded by the United States Department of Agriculture’s National Institute of Food and Agriculture, and operates through Ohio State University Extension. EFNEP serves limited-resource adults who care for children in their homes, as well as limited-income youth. EFNEP is offered in 20 Ohio counties.

AIM

To better serve Ohio’s pregnant women, EFNEP aimed to:

1) provide pregnant women with information regarding healthy choices during pregnancy, breastfeeding, and proper infant feeding practices.
2) equip EFNEP Program Assistants to teach pregnancy-related nutrition and physical activity information to pregnant EFNEP participants.

METHODS

EFNEP utilizes interactive discussions and activities to guide participants through a series of eight one-hour community based lessons aimed at improving diet quality, food safety, food resource management, and physical activity. Lessons are taught by EFNEP Program Assistants (PA). Ohio EFNEP utilizes the Eating Smart Being Active (ESBA) curriculum, which was developed by Colorado State University (CSU) and University of California at Davis (UC Davis). The curriculum is designed to teach the main messages of current, research-based dietary recommendations from the Dietary Guidelines for Americans and MyPlate. CSU and UC Davis developed three additional lessons that contain pregnancy-specific information (i.e. ESBA During Pregnancy, Feeding Your New Baby, and Feeding Your Baby Solid Foods). Depending on where a woman is in her pregnancy, EFNEP PAs can choose one (or more) of these lessons to teach as a ninth lesson in the eight-lesson ESBA series.

It is sometimes not possible to meet with participants for more than eight lessons. Therefore, to meet the needs of pregnant women during the eight lesson series, the Ohio EFENP team and a food safety expert utilized information from the three ESBA pregnancy lessons and pertinent food safety information to incorporate pregnancy information into the eight-lesson series. Relevant activities, worksheets, and handouts were also incorporated into the series to support and re-iterate the pregnancy information. A group of EFNEP PAs pilot tested the curriculum and feedback about the lessons was collected from them.

In 2015, the pregnancy information was reviewed again to ensure information was up-to-date and accurate. Current research and feedback from the PAs was used to review and revise the curriculum. Recent revisions included incorporating updated infant-feeding recommendations and shortening the amount of information so the lessons could be completed in 1.5 hours. A two-day training was held in August 2015 for twenty EFENP Program Assistants who planned to teach the pregnancy curriculum in their counties in fiscal year 2016. The evaluation process was also reviewed.

These two curriculums provide EFNEP PAs with two options for sharing pregnancy information with participants (depending if they only have a few pregnant women in a group or a group of pregnant women): 1) adding an ESBA pregnancy lesson as a ninth lesson, or 2) offering the eight-lesson ESBA series with the pregnancy information integrated into it.

RESULTS

The following pregnancy topics were incorporated into the eight-lesson ESBA series: importance of prenatal care, healthy eating and physical activity during pregnancy, healthy pregnancy weight gain, food safety during pregnancy, nutrition-related pregnancy discomforts, breastfeeding benefits and process, breastfeeding challenges and support, feeding infants formula, how often to feed baby, safe sleep for baby, stress, and drugs. Activities, handouts, and worksheets that correspond to these topics were integrated into the series to provide opportunities for participants to use the information and integrate it into their lives. Those participating in the pregnancy lessons receive informational booklets and educational enhancements to reinforce concepts from the lessons. Pregnancy-related questions were added to the EFNEP Behavior Checklist, which is distributed at lessons one and eight. (EFNEP participants complete pre-/post-Behavior Checklists and 24-Hour Food Recalls at lessons one and eight.)

In fiscal year 2016, the eight-lesson pregnancy series was completed in 5 counties (i.e. Cuyahoga, Franklin, Lucas, Mahoning, and Scioto). A total of three-and-five women graduated from the eight-lesson pregnancy series.

Results from the Behavior Checklists (n=35) indicated that:

• 83% of participants improved in nutrition practices
• 89% of participants improved in food resource management practices
• 46% of participants improved in food safety practices

Results from the 24-Hour Food Recall (n=34) indicate that:

• 26% of participants improved fruit consumption
• 59% of participants improved vegetable consumption
• 43% of participants improved fruit and vegetable consumption
• 15% of participants reported eating 4-5 cups of vegetables after participating in EFNEP
• 65% of participants improved in solid fats and added sugars consumption
• 41% of participants improved in physical activity

CONCLUSIONS

The ESBA curriculum has successfully supported positive nutrition, physical activity, food safety, and food resource management practices among limited-resource Ohio EFNEP adult participants. The addition of pregnancy information to the ESBA series enables EFNEP to meet the unique nutritional needs of pregnant participants. Sharing pregnancy information with pregnant participants increases the potential for positive health outcomes among EFENP moms and their babies. Having the option to complete the series in eight or nine lessons allows the opportunity to meet the scheduling needs of participants and partner agencies.

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