A pilot hunger awareness program was developed for fourth graders in a low-income elementary school. Objectives were to provide students with information that would increase their awareness of hunger in their communities by helping them identify signs of hunger, food pantries located within their school zip code area, and a resource person in their school who could help children gain access to food. The Community Childhood Hunger Identification Project (CCHIP) questionnaire provided a framework for the development of the program. CCHIP survey questions were modified to be appropriate for a fourth grade class. Instructional materials and evaluation forms were developed and pilot tested. Instruction was given to a group of 62 fourth graders in a low-income elementary school. A pretest and posttest were administered to the students. Results showed that 50 percent of the students identified signs of hunger on the pretest, while 88 percent did so on the posttest. Teachers reported that students discussed hunger and food pantries. In order to further determine classroom needs for hunger education, semi-structured interviews were conducted with hunger experts in the United States. The experts indicated that the hunger education development process should include students, school personnel, parents, community representatives, and those who have experienced hunger. Activities should include visits to food banks, food pantries, food stamp offices, and participation in school lunch and breakfast programs.
ABSTRACT:

Hunger affects concentration and learning abilities of children and exacerbates a multitude of other societal problems. School age children, professionals in education, parents and other community members need to become more aware of hunger in schools and the community. Available educational materials focus on hunger at the global level. The Community Childhood Hunger Identification Project (1992) estimated that over eight million children in the U.S. are at risk of being hungry. Zemel and coworkers (1992) identified that there were 3.4 hungry children per classroom in one community’s school district. Thus, there is a need to include hunger education in school curricula. A semi-structured interview of hunger experts in the U.S. was conducted to identify strategies to use in the development of hunger education activities. They supported schools as a focal point for hunger education. These experts indicated that hunger education development process should include students, school personnel, parents, community representatives, as well as those who have experienced hunger. Hunger education activities should be integrated throughout the curriculum. These preliminary findings will guide development and evaluation of hunger education activities. A 12-item list of references is included.
HUNGER IN THE U.S. - DEVELOPING EDUCATIONAL APPROACHES

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Hunger is an overwhelming problem in the U.S. An estimated 5.5 million children under age 12 in this country are hungry and an additional 6 million children under age 12 are at risk of hunger (Food Research and Action Center (FRAC), 1991). In our experience locally, over one quarter of the teachers in a school district stated children in their classrooms were hungry because they did not have enough food at home. An average of 3.4 +/- 1.9 hungry children were reported per classroom. (Zemel, Brokaw, Huntsinger, & McMichael, 1992). Children are susceptible to hunger in the U.S. due to their dependency on the family and the community to provide them with a nurturing environment (Splett & Story, 1991).

A recent newspaper article interviewed mothers who lived in a low income neighborhood. These women said that they had seen children lingering outdoors during the summer eating only french fries. One mother said that she doubted the children had one meal a day. Another woman noticed children searching for food in garbage dumpsters (James, 1991). Children need to be empowered to meet their food needs in a more healthful manner.

There are programs within communities which can be used in times of need. Emergency food organizations, for example, can help to feed these children. If children are empowered, they can seek resources by themselves or through parents, teachers or other adults. Hungry children who do not receive adequate nutrition may experience poor physical and mental development and have decreased resistance to infection. Thus, if children do not get the food they need they may not learn as well or as much in school. Hunger can also lead to increased medical, educational,
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According to the Healthy People 2000: National Health Promotion and Disease Prevention Objectives, children are targeted as an important group for health promotion and disease prevention goals (Department of Health and Human Services, 1990). Two important goals of the Healthy People 2000 report are to reduce health disparities among Americans and improve the effectiveness of health education in schools. Learning about hunger and its prevention is also an important component of health promotion and disease prevention and needs to be addressed in the classroom.

The Dietary Guidelines for Americans include seven recommendations: (1) Eat a variety of foods, (2) Maintain healthy weight, (3) Choose a diet low in fat, saturated fat and cholesterol, (4) Choose a diet with plenty of vegetables, fruits and grain products, (5) Use sugars only in moderation, (6) Use salt and sodium only in moderation and (7) If you drink alcoholic beverages, do so in moderation (U.S. Department of Agriculture & U.S. Department of Health and Human Services, 1990). These guidelines, which primarily attempt to correct overconsumption of specific nutrients, are currently being implemented in many school health education curricula and in cafeteria menu planning (Zemel & Huntsinger, 1992). However, schools need to address problems of hunger and undernutrition as well. A hunger education program can empower the children to act as advocates against hunger and take action to reduce their own hunger.
BACKGROUND:

Graduate students in the Public Health Nutrition Program at the University of Tennessee in Knoxville work in Knox County to reduce nutritional needs identified in the community. A hunger awareness project was developed to meet those needs identified in a teachers' questionnaire directed toward dietary behavior of children. In order to further evaluate available materials which address hunger education needs in a classroom, existing curriculum materials were assessed. Most focused on world hunger. World hunger is certainly a problem, however hunger in local communities needs to be emphasized as well. Educational materials did not appear to have been systematically developed. Furthermore, evaluation only included subjective comments made by the authors that materials had been successful.

A hunger awareness project was developed to provide information that would empower the children at risk of hunger to obtain food which would decrease the incidence of hunger in the school district. Fourth graders were chosen as the target audience because they could understand the concepts of hunger (McMichael, 1992).

The objectives of this project were to provide fourth grade students with information that would increase awareness of hunger in the communities by helping students identify signs of hunger, food pantries within their school zip code, and a resource person within their school who could help children gain access to food.

The Community Childhood Hunger Identification Project (CCHIP) questionnaire (Wehler, Scott, & Anderson, 1992) provided a framework for the development of the project. The original questions from the CCHIP survey had already been validated as
being a measure of hunger risk (FRAC, 1991). The next step was to develop a lesson plan, instructional materials and evaluation instruments. The CCHIP survey questions were modified to be appropriate in a fourth grade classroom:

(1) family running out of money to buy food for a meal;

(2) parents or grandparents eating less than they should because there is not enough money for food;

(3) parents or grandparents eating smaller meals or skipping meals because there is not enough money for food;

(4) eating less because there is not enough money for food;

(5) eating smaller meals or skipping meals because there is not enough food in the house;

(6) being hungry because there is not enough food in the house;

(7) having less food in the house because there is not enough money to buy food; and

(8) going to bed hungry because there is not enough money to buy food.

Instructional materials and evaluation forms were developed and pilot tested.

The lesson was presented to a group of 62 fourth grade students in a low income elementary school to present instruction and facilitate discussion of hunger. A pre-test and a post-test were administered to students. Fifty percent of the students were able to identify signs of hunger on the pretest; 88% of the students were able to on the post-test. Teachers also reported that students discussed hunger and food pantries at other times.
In order to further evaluate hunger education needs in a classroom, a semi-structured interview of hunger experts in the U.S. was conducted. Experts who had recently published articles on hunger and malnutrition were identified (Dodds, 1992). These experts included educators, researchers and hunger advocates. Questions presented to the experts included:

1. should we include hunger awareness education in our elementary schools;
2. who should be involved in development of a hunger education curriculum;
3. who should be part of a hunger awareness education program at the elementary setting;
4. who would deliver the hunger education curriculum;
5. what would the curriculum include;
6. how would you measure hunger awareness or how would you evaluate the hunger awareness curriculum; and
7. what grade should be the prime focus or should it be included in all grades?

Responses were evaluated and categorized. All experts agreed that hunger awareness education should be included in the elementary school curriculum. Only one expert felt it already existed in the nutrition curriculum.

Hunger experts suggested that development of hunger education materials should include information from: social service professionals, food and nutrition professionals, teachers and school administrators, local hunger advocates, students,
parents and those who have experienced hunger.

Many experts felt that the principals and teachers should be involved in the hunger education program at the elementary school setting. Others felt that the parent teacher association, school lunch administrators, school nurses and nutritionists/dietitians from the community be included in hunger education.

Teachers, nutritionists and health professionals were recommended to deliver instruction to the students. According to the experts, hunger awareness educational materials should emphasize classroom activities as well as community experiences and should involve teachers as well as community members. Activities should include visits to food banks, food pantries, food stamp offices, and participation in school lunch and breakfast programs.

Many experts believed that educational material should include concepts such as empathy, inequality in our society, sharing, social responsibility and an explanation of why people do not always have food. Other concepts such as access to food, nutrition, the social role of food, health consequences of hunger and grocery shopping were recommended. Two experts felt that hunger problems in third world countries should also be addressed.

Experts suggested a variety of ways to evaluate hunger awareness including: paper and pencil tests, classroom discussion and poster contests to assess knowledge of hunger, empathy as well as social responsibility.

The majority of hunger experts felt that hunger awareness should be included throughout elementary, middle and high school. Some felt that hunger awareness be
emphasized in fourth, fifth and sixth grades. Experts recommended that hunger education be integrated into all content areas including health, science, social studies, language arts and math.

CONCLUSIONS:

A pilot hunger awareness program was successful in increasing knowledge about hunger in a fourth grade class. Semi-structured interviews with the hunger experts provided valuable information on hunger awareness. Some of their recommendations had already been incorporated into the hunger awareness pilot project. However, further refinement of the project is needed to determine if the empowerment model is an effective educational approach for teachers and students.

There are hungry children in our communities who need to gain access to food. However, we do not know exactly what knowledge they have of how they feel about hunger. By using qualitative methods such as focus groups, we can better define what children need to know about hunger in our communities as well as ways to empower them to have access to food (Krueger, 1992). We can also determine teachers’ needs in integrating hunger education into the curriculum.

The information collected from the focus groups can be used to develop educational materials and lesson plans that can be used in various content areas using a whole language approach (Watson, 1989). Materials can be adapted to empower children at risk of hunger to gain access to food. Thus, by incorporating hunger awareness into the curriculum, schools can have an active role in increasing hunger awareness and reducing childhood hunger in the community.
References


