



# The Big Refrigerator Project: Promoting Kids Health Literacy at a Safety Net Clinic



Ellen B. Daroszewski PhD, APRN & Marion Dunkerley RN, MSN  
California Baptist University, School of Nursing

## Health Literacy

Health literacy is distinctly different from general literacy focusing on "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (IOM, 2004). Health literacy is as important for children as for adults and needs to be developed early in the lives of children using a process which builds and nests health knowledge to inform and empower children as they grow (Borzekowski, 2009). In addition children's health literacy efforts should incorporate a developmental and educational approach both within and outside of traditional provider encounters (Borzekowski, 2009). The goals for a children's health literacy program are the same as those for adults, to be able understand and apply health knowledge to lifestyle behaviors, choices, and interactions with the health care system in order to improve health outcomes.

## The San Bernardino Community

- Families comprise 76% of the households in San Bernardino County, including both married-couple families (52%) and other families (24%)
- As of 2010, 29% of the population is under 18
- 13% of households with children under 18 are led by a single parent (male or female)
- Overall, families with children under age 18 comprise 39% of all households
- 2010 Census poverty data indicate that 19.3% of San Bernardino County families with children live in poverty, a five year increase of 4.3 percentage points
- Fully 24.7% of all San Bernardino County children live in poverty
- In 2010/11, 65.8% of K-12 public school students lived in families with incomes low enough to qualify for free or reduced price school meals, up from 63.4% in 2009/10
- A child is eligible if his or her family's income is below 185% of the poverty level (e.g. \$41,348 for a family of four in 2011)
- Over the past 10 years, eligibility has increased 27% in San Bernardino County, compared to 20% statewide



## H Street Clinic

The H Street Clinic is a private non-profit safety net clinic in the medically underserved area of urban San Bernardino, California. The clinic provides primary care for 4-5000 patient visits annually. The population of the target community served by H Street clinic predominately resides in zip code 92405. The total population is 28,873 with a total population of 528,243 when including the immediate surrounding zip code areas of 92411; 92410; 92408; 92407; 92404; 92401. In 2011, only 1,217 residents of the target area were served by the current clinics. There are an estimated 14,330 unserved low income residents in the target zip code area.



## The Health-Art-Literacy Project

**Goal:** To provide an ongoing health literacy based environment and activities for children who visit the clinic either as patients or with their families.

**Capacity Development:** The clinic waiting room was designed with a dedicated children's area. In fall of 2012 through painted murals the area was transformed by a local youth artist into a typical kitchen representative of any one of the houses in the surrounding community. The kitchen counters were painted with healthy foods and the windows of the kitchen looked "out" onto play areas. The kitchen mural included an oversized refrigerator that was painted with magnetic paint. Child sized chairs and tables, and bins with art supplies, were set up. A binder of a variety of age appropriate children's health literacy activities was developed.

**Implementation:** Once a week after school, a trained art teacher held art classes for children from a local after school program focused on age appropriate health literacy education using hands-on art and creative activities. The products of the classes, if not taken home, are displayed on the "big refrigerator" with magnets, or displayed in other parts of the waiting room further adding to the health literacy of the environment.

**Preliminary Outcomes:** Fifteen children ages 5-15 are currently participating in the project and "decorating" the clinic with representations of health. All are enthused and learning as they complete their health literacy artwork. After the conclusion of the program the attendance, participation, and self-reported satisfaction with the class will be assessed along with an examination of the products of the art-health-literacy program for health literacy content and knowledge.

## Acknowledgments

This project was partially supported by a grant from the Community Foundation of Riverside and San Bernardino Counties

## For further information contact

Ellen Daroszewski, PhD, APRN  
[edaroszewski@calbaptist.edu](mailto:edaroszewski@calbaptist.edu)  
Marion Dunkerley RN, MSN  
[mdunkerley@calbaptist.edu](mailto:mdunkerley@calbaptist.edu)