

## THE BENEFITS OF HEALTH EDUCATION IN RURAL GUATEMALA

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What would be the benefit of providing a health education curriculum and in-service training to the teachers at Colegio Evangelical Shaddai (CES)? This is the question that guided my research project. Specifically, I wanted to see if our project would increase the likelihood that school children would develop a better understanding of healthy behaviors and help prevent disease transmission between children and their families.

It was my introduction to Maslow's hierarchy of needs in an educational psychology class that piqued my interest in this project. To briefly summarize, Maslow outlined a theory of human motivation with five levels of needs that enables a person to grow, fully engage in learning, and eventually to integrate the learning into thought processes and behaviors. At the lowest levels of Maslow's human needs satisfaction pyramid, people need water, food, and other basic necessities, such as shelter and clothing. Once these needs are met, more complex needs arise, which can be thought of as the next level of the pyramid. The higher levels of the pyramid are grouped as follows: physiological, safety, love/belonging, esteem, and finally self-actualization (Santrock, 2008). While studying this theory, I wondered how it could be applied to students in a developing country and how it might relate to their culture.

### LITERATURE REVIEW

In my review of the literature, I found a number of sources that indicated a need for a comprehensive health education curriculum in Guatemala. The following literature review includes statistics and segments from the three most pertinent sources.

According to Dr. William H. Chickering, patients who entered the clinics in Guatemala presented some common symptoms. This helped to inform our project on how we should tailor the content of our curriculum. According to Chickering (2006), the most common symptoms were, in descending order of frequency: musculoskeletal pain; abdominal pain; cough and upper respiratory symptoms; headache; weakness, fatigue, and dizziness; skin lesions and/or itching; anorexia and/or weight loss; diarrhea. Chickering's list gave us an idea and a starting point for our project.

Flores, Robles, and Burkhalter (2002) describe an experiment to determine the difference between diarrhea treatment given to two groups: a control group and a group that had gone through a program to educate them on how to treat the symptom. The authors found that there was a 25% increase in the classification of the disorder from the control group to the program group. The article highlighted the fact that diarrhea and cholera are extremely prevalent in Latin America. The article concludes with a description of the program and its results.

USAID (United States Agency for International Development, 2007) statistics were relevant to my project. For example, the infant mortality rate in Guatemala is 39 out of 1,000 live births, which is third highest in the entire hemisphere. Maternal mortality is also high at 153 for every 100,000 live births. In addition, only 41% of all births in the country are attended by a nurse or doctor. USAID's statistics for education in Guatemala are just as bad. Only three out of ten children graduate from the sixth grade, with the average amount of school received per child being only four years. However, there have been improvements in some areas of health and education in recent years. For example, primary school enrollment for girls has nearly doubled recently in some areas, more than 2,000 scholarships have been given to rural indigenous youth from 19 different ethnicities, and while maternal and infant mortality rates are bad, they were worse a few years ago. In addition, immunization programs have grown and now reach almost 90% of the people in rural Guatemala. All of these statistics show that with the help of education and effective health programs, these areas can show significant improvement.

Existing research cited here made a significant contribution to our project, especially in helping us set our goals and define success. For our project, Professor Randi Lydum and I worked together to develop and implement an interactive health education curriculum that would help to educate the children at CES about healthy behaviors. We began by choosing and modifying a set of U.S. standards that could guide our project. We divided these standards into three levels: novice, intermediate, and advanced. Through these levels we were able to establish a framework on which our curriculum could concentrate, including dental and personal hygiene, basic anatomy, personal safety, and general nutrition. All of these areas of interest fell under our basic umbrella of disease prevention and promoting healthy behaviors.

Once the framework was established, the lesson plans were developed. We found more than fifty lesson plans for the health curriculum. We reduced that number to the ones we felt would most benefit the school and put them

into their corresponding content areas. We then gathered the materials that the school might need to implement our curriculum, including sports balls, glitter, books, and skeletal puzzles. Once we were in the country, we had all written material translated into Spanish. Through the help of a translator, we were able to share some of the activities with the children.

In addition to working with the school, we visited several local clinics to observe the type of healthcare that is available for the people in Guatemala. In our visits, we learned that the primary conditions under which they provide treatment at the clinics confirmed what we had read throughout our research. The most common conditions were upper respiratory infection and diarrhea. Both of these maladies can be attributed to viral infections and poor health education.

### **ANALYSIS**

For my project, numerical results were fairly difficult to compile without having the curriculum in place for a number of years. However, there were a few visible examples of the children absorbing the information that we had shared with them. For example, one of the little girls that attended the dental hygiene lesson began constantly brushing her teeth throughout the school day. We thought that this was great progress because a number of the students had visible dental problems. As far as other noticeable results, there appeared to be an increased number of students washing their hands before coming out of the bathroom, although they did not have handsoap.



During our time in Guatemala and our clinical visits, we determined that our research confirmed the most common symptoms presented in the clinics. When we spoke with the people that ran the clinics, they told us that they thought that the best way to solve the problems would be through the education of the people of Guatemala. The only problem for them was that these health professionals lacked the time, money, and supplies to provide the needed education.

## REFLECTIONS

The strength of our project was that it informed the community's students on how to lead a healthy life. By giving them a curriculum with a set of standards and guidelines they can adapt to however they feel necessary, the curriculum can change as the areas that need focus change. From my experience, education is the best way to help solve some of the health care problems that result in human suffering in Guatemala. By the time this group of Guatemalan children are adults, it is possible that they will have all the knowledge they need to lead a more health-conscious life, which hopefully they will share with their children. I hope that in some small way our project has started a change in education to promote healthy behaviors among the people of Chiquimulilla, Guatemala.

Upon my return from Guatemala, I had a new perspective on Maslow's "Hierarchy of Needs." The events that I observed while in the country would indicate that the children of Guatemala may lack some of the material things that Maslow designated as essential. I would definitely say that there is no lack of love shown toward the students. I think that this is a large part of why the students of CES are fully engaged in their learning, even though on the surface it may seem they lack essential elements listed in Maslow's theory.

## REFERENCES

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