UC San Diego

Independent Study Projects

Title

Improving Diabetes Education for the Lao Community: A Culturally Tailored Approach.

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Title: Improving Diabetes Education for the Lao Community – A Culturally Tailored Approach

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Specific Aims:

The primary goal of this project is to create a diabetes educational tool that will bridge the communication and cultural barriers that exist between the Laotian community and the health care providers. Secondarily, it serves to enhance the understanding of the cause, management, and treatment of diabetes.

Design and Methods:

The project consisted of three phases: creation of the video, analysis of its effectiveness, and distribution.

Phase 1: Creation of the educational video

The making of the video involved two key elements, educational and cultural. The educational aspect consisted of video footage from the Take Control of Your Diabetes video series providing an overview of the cause, signs and symptoms, management, and treatment of diabetes. These video footages were then edited and dubbed into the Lao language. The second element of the video contained testimonials from actual Lao community members living with diabetes. Participants were asked to share what they knew about diabetes including its cause, complications, prevention, management and the cultural methods in which they used to cope with the disease. Their responses were videotaped and used in segments of the diabetes education video. Once the video was completed, it was shown to ISP committee members to assess the accuracy of the content and to ensure that there was a balance between western medicine and cultural beliefs.

Phase 2: Efficacy of the video

The second phase of the project was to determine the efficacy of the video via a screening event in Fresno, California. The event had 20 Laotian participants, 11 females and 9 male with ages ranging 35-60 and with varying education level. Participants were asked to take a brief 10-question questionnaire in Lao regarding their knowledge on the cause, complications, care, prevention, and management of diabetes. Afterwards they were shown the 30-minute diabetes education video. Upon the completion of the video, there was a brief question and answer segment. Once all questions and concerns were addressed, participants were asked to retake the diabetes questionnaire again. Questionnaires are anonymous and were assigned a letter and number combination for identification. Pre-and post-test were matched according to this letter and number combination. The results of these pre-and post-tests were analyzed to assess the effectiveness of the video.

Phase 3: Distribution of the video

This was done via the following avenues:

- 1. Uploaded onto Youtube
- 2. Distributed/shown at the First Annual Lao Community Health Fair at the Buddharam Temple of San Diego, CA
- 3. Distributed at the Temple Festival in Fresno, CA
- 4. Distributed at events held by Lao Parent Student Teacher Association and Lao American Coalition
- 5. Aired on Lao satellite television stations MKTV and NATtv who's combined audience is about 100,00 viewers that reach the United States, Canada, Thailand, Cambodia, and Laos.
- 6. Endorsed by Lao Voice of America News and Lao-American National Alliance Organization

Results:

1. <u>Test Analysis</u>: Participants included twenty Laotian adults, 11 of whom were female, 9 were male and ages ranging from 35-65. Of the participants, 11 graduated from elementary school education only, 6 graduated from high school only, and 3 received a college education. The average pre-test score was 4.6, post-test average was 6.3. Sixteen of the twenty participants showed overall improvements in score.

Table 1: Demographics (n=20)

Ages	35-67
Gender	Female=11 Male=9
Education Level	Elementary School= 11 High School=6 College=3

Table 2. Raw Scores of Pre/Post Tests

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N=20	PRE-TEST	POST-TEST	DIFFERENCE	
	SCORE	SCORE		
1	3	4	(+) 1	
2	4	5	(+) 1	
3	10	10	Same	
4	2	4	(+) 2	
5	2	7	(+) 5	
6	4	3	(-) 1	
7	6	8	(+) 2	
8	5	6	(+) 1	
9	6	6	Same	
10	4	4	Same	
11	6	7	(+) 1	
12	5	8	(+) 3	
13	5	6	(+) 1	
14	5	6	(+) 1	
15	5	7	(+) 2	
16	6	7	(+) 1	
17	5	8	(+) 3	

18	5	7	(+) 2
19	1	6	(+) 5
20	4	8	(+) 4

Table 3. Analysis of	Scores

	PRE-TEST	POST-TEST
Average Score	4.6	6.3
Range	1-10	3-10
Median	5	6.5

Table 4. Score Changes

Table 4. Score	Table 4. Score Changes		
Summary	Increased	No Change	Decreased
	n= 16	n=3	n=1

- 2. <u>Youtube</u>: The video was uploaded on Youtube as a playlist and open to the public to view. Since the initial upload, it has had 736 views. Below are comments in response to the video.
 - a. I'm a second year pharmacy student and think this is a great video for the Lao community. I'm going to show it some of my family members too. Hopefully you can make more educational videos like this.—alrang
 - b. Thank you so much for putting this video together....I find this very helpful to the Laotian community especially those that have limitation in the English language....I have a few family members who have diabetes and I'm very happy to share your clip to them.

 Hoping that you have more video in the future. kob jai from the heart –9goong
 - c. Khob Chay Laii Laii. Thank you very much. Very educational. Very interesting. Very true.-itubealot707
 - d. I applaud the videos creator. These videos are excellent, they educate and also make you realize the danger of neglecting. They make you think hard and wanting to get serious in taking control of your health, in changing your eating habits and life style. We hear the health expert, we see the results of neglecting. Audio visual method is a very efficient way to get the message across. The translation is clear and easy to understand. Ms. Khamph: Thank you for caring. -Na Bounchanh
- 3. <u>First Annual Lao Health Fair</u>: Took place on March 12th, 2011 at the Wat Lao Buddharam of San Diego, California. The event had participants from over twenty different health organizations, including UCSD School of Medicine, and over 300 attendees. The video was a component of the hypertension and diabetes education booth. Participants were shown the video in a viewing area and then were given the opportunity to ask questions about diabetes at the diabetes table where they were also given pamphlets about diabetes and a copy of the video.
- 4. <u>Lao Satellite TV:</u> The video aired on MKTV and NATtV (Lao satellite television station) as part of their Health Segment for three months, three times/week. These stations are broadcasted all across the United States, Laos, Canada, Thailand, and Cambodia and have an estimated 100,000 viewers.
- 5. <u>Voice of America:</u> The making of the video was featured on Voice of America-Lao edition, which highlights Lao-Americans making a difference in their communities. Pictures from the health fair and links to the video were placed at the end of the article.
 - a. http://lao.voanews.com/content/khamphouvanh-diabetes-122728994/1200985. http://lao.voanews.com/content/khamphouvanh-diabetes-1227289. http://lao.voanews.com/content/khamphouvanh-diabetes-1227289. http://lao.voanews.com/content/khamphouvanh-diabetes-1227289. http://lao.voanews.com/content/khamphouvanh-diabetes-1227289. http://lao.voanews.com/content/khamphouvanh-diabetes-1227289. http://lao.voanews.com/content/khamphouvanh-diabetes-1227289. http://lao.voanews.com/content/khamphouvanh-diabet

Discussion:

In assessing the pre-test scores, it is evident that most participants did not have a basic understanding of diabetes. Through observing and speaking with the participants, it was clear that their source of information about diabetes came from what their friends and neighbors told them and not from health professionals. This is because of two reasons. The first is that there are very few health professionals that can speak Lao and can relate to the Lao cultural values. The second reason is that culturally, "word of mouth" is the primary means of communication and the majority of health information is via written flyers/pamphlets. These cultural and language barriers affect the way diabetes education is received and hence needs to be addressed to improve diabetes education.

The primary goal of the project was to create a means of diabetes education that addressed the language and cultural barriers as well as have the delivery of information be widely accessible. This was the reason for having video as the format of information delivery and also for having the video incorporate Lao cultural values, living style, and featuring Lao community leaders and members. In assessing the post-tests and noting the improvements in scores just minutes after viewing the video, it was evident that the video provided clarification about key diabetes information. However, due to the small sample size (n=20), it is unclear whether the same results can be expected in the larger population. Despite the sample size being a limitation to the study, the results did provide some insights on how to best approach health education in the Lao community. These include, identifying what the community perceives to be the factors that are hindering their education, how best to address these factors, and most importantly how health care providers can work with the community to address these issues. By having the community take lead in addressing the issues, not only is there increasing receptiveness to the project but also empowerment within the community member as well.

In addition to learning how to effectively put together education materials, there were other challenges I needed to address. In order to obtain the participation of the Lao community I needed to earn the trust of the Lao elderly community. This is due to the hierarchical and patriarchal customs of the Lao culture. I, being a young female without much social status and who was not originally part of the San Diego community, thought it would be very difficult to overcome this barrier. To my surprise, it was not as hard as I anticipated. I believe this was for several reasons. The first was that, prior to starting this project, I had worked with the Lao community once before on a grass root research project that sought to find the health concerns of the community. Through this, I had established a relationship whereby I became the liaison between the community and the outside world. Secondly, because I was a Lao medical student (which is very rare for the Lao community), the fact that I was a young female did not matter. They were just proud to finally have some representation in higher education. Lastly, this was the first time the community felt that their concerns were being heard and addressed. All these reasons combined have shown me that though the Lao community continues to hierarchical and at times closed off to "outsiders", they are open and accepting if cultural customs are respected and the goals are in the best interest of the community.

I learned three very important lessons after having completed this project. First and foremost, I learned the effectiveness of using video (especially if the content is in the Lao language) as a tool for health education in the Lao community. Given the receptiveness of the diabetes education video and the frequent inquiries about whether there are other education videos in Lao, I anticipate that this would be a very useful education tool in the future. Secondly, I learned how much the community is able to achieve if they are given the right opportunity to do so. When I began the project, I was unsure of not only the level of participation but also the receptiveness of the video. To my delight, the community took on the project as if it was their own and even went out of their way to make sure the video was known both at a national and international level. This was the most rewarding aspect of my project because I felt I was able to provide an opportunity for the community for self-empowerment. Lastly, the

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greatest learning point I took away from this was that I am not alone in my journey to becoming a doctor. I was touched by the Lao community's willingness to help, how proud they were of my accomplishments, and how welcoming and accepting they were of my endeavors. Overall, though the primary goal of project was to create an effective diabetes education tool, I ultimately walked away with greater sense of purpose for pursing a career in medicine and more importantly, lessons on how to effectively work with the community in which I serve.

The video can be viewed on Youtube via the following link:

http://www.youtube.com/playlist?list=PL0D04F50B34123992