# Utilizing Readers Theater for Health Promotion Education in a Rural Setting

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### Abstract

**Purpose:** The aims of the study were to bring in healthy foods, such as fruits and vegetables, provide cardiac health promotion information, and build a community-based partnership with a rural community in West Alabama by soliciting members of the community to participate in and attend a play on cardiovascular health promotion.

**Sample:** The sample population was mostly older African American community members from a non-incorporated, rural area along with individuals from surrounding communities in an Alabama Black Belt county. Through community collaboration, 67 persons were recruited to participate as actors via reading a script and (n =13) and all remaining persons were audience members for the community play (n = 54).

**Method:** This study utilized a community-based participatory research approach with a qualitative, descriptive research design. The Farmers Theater Toolkit, which utilizes a readers

theater technique was used to bring cardiovascular health promotion information to a rural community setting.

**Findings:** The majority of audience participants either strongly or somewhat agreed that what they learned from the community play would help them make better food choices (96.3%).

**Conclusion:** Utilizing the Farmers Theater Toolkit in a rural community was an innovative, fun way to share health promotion information. The citizens of this community were very welcoming to the researcher and were excited to partner with an academic institution. Health promotion education may reduce health risk behaviors such as unhealthy food choices. This type of intervention may serve as an impetus to making better food choices.

Keywords: rural community, theater, health eating, health promotion

#### Utilizing Readers Theater for Health Promotion Education in a Rural Setting

Cardiovascular disease (CVD) is the leading cause of death in the U.S. (American Heart Association, n.d.; Centers for Disease Control & Treatment [CDC], n.d.). The term CVD refers to diseases of the heart as well as the blood vessels (CDC, n.d.). Eating healthy foods such as fruits and vegetables have been shown to aid in the prevention of heart disease (Aune et al., 2017). Educating individuals about modifiable risk factors such as diet is a way to help individuals become proactive in CVD prevention. There have been many initiatives to educate rural dwellers on modifiable risk factors. However, the best strategy is yet to be determined. This study utilized readers theater as a unique health promotion education strategy. Readers theater is a community theater concept that allows actors to be familiar with and read from a script rather than memorizing lines or parts (Reed & Claunch, 2017). The script conveys information you would like the audience to remember.

Eating healthy foods such as fruits and vegetables have been shown to help mitigate the risk of CVD, yet recent studies have shown an increase in CVD in women in rural populations (Virani et al., 2021). Access to healthy foods, even in rural areas, can be a problem (Rural Health Information Hub, n.d.) According to the United States Census Bureau, rural refers to any population that is not in an urban area (United States Census Bureau, n.d.a). Terms such as food deserts, food insecurity, and low access food areas are all used to describe geographical regions that typically rank low on the socioeconomic scale and are made up of a minority population (Massachusetts Institute of Technology, n.d.; U.S. Department of Agriculture, n.d.a). Other factors such as lack of transportation and finances can also be a deterrent to eating healthy. The aims of this descriptive study were to engage in the distribution of health foods, such as fruit and vegetables, provide cardiac health promotion information and build a community-based partnership with a rural community in West Alabama through the use of community readers theater.

### Background

Food deserts are commonly thought of from a geographic perspective, but emphasis has also been placed on the economic and health components of affected communities (Karpyn et al., 2019). The area known as the Black Belt in Alabama originally referred to the black soil of the area, however, the term is now associated with areas of low socioeconomic status (University of Alabama, n.d.). Many counties in Alabama's Black Belt are persistent poverty counties with low food access areas. Persistent poverty areas are counties that have rates of poverty at 20% or more (Housing Assistance Council, n.d.). Rates of poverty are higher in the south and in non-metro areas (U.S. Department of Agriculture, n.d.b). Areas of poverty typically are areas of low food access and contribute to poor health conditions (Rural Health Information Hub, n.d.; U.S. Department of Agriculture, n.d.a). Furthermore, areas with low food access have a higher incidence of older adults who are affected by chronic health conditions (Llyod, 2019). Therefore, it is not only important to make healthy foods more accessible, but it is also important to educate individuals on the importance of eating healthy to prevent negative health outcomes. Presenting health information in a personalized manner that includes social interaction, such as in a community readers theater play has been shown to be an effective teaching tool (McCallum et al., 2021).

### Method

This study utilized a community-based participatory research (CBPR) approach with a descriptive research design. In CBPR members of the community work with the researcher throughout the research process and in decision-making, which can create trust among community members (Wickman & Carbone, 2018). The study was approved by the corresponding author's Institutional Review Board (IRB). In addition to the corresponding author, the research team was comprised of the president of the local non-profit community outreach organization in the community along with two undergraduate students. The president of the outreach is a strong community advocate who is very influential in the community and frequently organizes community events for the seniors of the county. The location of this study was an unincorporated town and census-designated place (CDP) located in Sumter County, a Black Belt County in Alabama. The county has nine towns. The town of Panola and surrounding towns were the focus of this study. In 2018 heart disease was listed as the number one cause of death in Sumter County (Alabama Department of Public Health, n.d.). The town of Panola has a population of 71 (Alabama Demographics, n.d.). The racial make-up of the community is 91.5% (n=65) African American or Black and 2.8% (n=2) Caucasian or White, 1.4% (n=1) Hispanic or Latino and 4.2% (n=3) two or more races (Alabama Demographics, n.d.). In 2020, the population of Sumter County was 12, 345,

with a median income of \$24, 320 and a poverty rate of 31.8% (United States Census Bureau, n.d.b).

#### Intervention

Healthy foods were provided to the community monthly for a total of six months. Examples of items included in the food pantry were apples, grapes, peanut butter, and frozen cod. The food items were distributed through the Food Pantry program operated by the local Feed America organization. The research team worked alongside community members who volunteer at the nonprofit and assisted with assembling and distributing food boxes and with the distribution of the boxes. In order to qualify for food boxes recipients had to meet Feed America qualification guidelines. Approximately 90 families from the county met The Emergency Food Assistance Program (TEFAP) certification of eligibility requirements. Food box distribution occurred during the COVID-19 pandemic, so everyone followed the CDC COVID-19 guidelines. Recipients drove up, opened their trunks, and a box was placed in the trunk. Food box recipients were recruited to participate as the audience for the play and the community volunteers who helped to assemble the food boxes were recruited to participate as actors in the play. The community actors participated in script writing for the play with a focus on the importance of eating fruits and vegetables to help prevent heart disease. The research team reviewed the heart healthy information with the actors. Actors and audience were informed of the fact that the play typically would have been a dinner theater type of play, but due to the pandemic the play would be held outside, and a nutritious box lunch would be provided to take home. Cardiovascular health promotion brochures were also included in the food box. The brochures were from CardioSmart of the American College of Cardiology (n.d.). The study was funded by an internal grant at the researcher's academic institution and approved by the IRB.

# **Procedure for Readers Theater**

With a focus on community non-profits and cardiovascular health in the rural setting, the researcher sought a rural non-profit organization to partner with. The goal was to provide access to healthy foods as well as cardiovascular health promotion information to an area that also qualified as a food desert. In addition to the CV brochures and food, the team also wanted to bring the community together in an engaging way at the end of the six-months to showcase the CV information contained in the brochures. Hence, the culmination of the study was a community play that stressed the importance of eating healthy to mitigate heart disease.

The organizational framework for the play utilized Readers Theater. Readers Theater allows the performer to read from a script versus having to memorize lines (McCallum et al., 2021; Reed & Claunch, 2017). Readers Theater is a unique, fun way to share health promotion information in a community setting. The University of Kentucky's Farmers Dinner Theater (FDT) Toolkit served as a guide for developing the community play and post play evaluation survey. Permission to use the toolkit was obtained from the FDT Toolkit developer (Reed, 2018). An important aspect of the FDT Toolkit is that members of the community participate in writing the play and are actors in the play. The idea was to communicate important health promotion information along with local humor as a fun way to learn.

Due to COVID-19 and having to overcome technology challenges in a rural setting, rehearsals were held over the phone on a free conference line. There was one in-person rehearsal held at the outdoor pavilion a week prior to the play. Advertising for the play was conducted primarily by word of mouth. The play, which was developed with the help of the community partner and actors, was comprised of two acts, thereby providing more acting opportunities. Pleasantly, there were several community members who wanted to participate. The total

completion time for the play was approximately 45 minutes. The scripts for the play contained a storyline related to information from the brochures such as the importance of eating more fruits and vegetables to help prevent heart disease. In addition to reading the respective scripts and adding humor, singing was also incorporated. Popular southern Baptist church songs were altered to include lyrics that encouraged the audience to eat more fruits and vegetables. At the end of the play both actor and audience participants completed an evaluation survey.

## Sample

The president and founder of the local non-profit works to provide social outlets and opportunities for seniors in the area. Therefore, a convenience sample of seniors from the community were chosen. The seniors in the local and surrounding communities were chosen as participants to serve as actors for the play, n = 13. All of the actors in the play ranged in age from 60 to 90 years old and were residents of the county. Audience participants were recruited from individuals who came to pick up food boxes, n = 54. In addition to the audience members who were food box recipients, other guests also attended such as grandchildren, nieces and cousins.

### Findings

A total of 67 participants (n=67) completed the post play surveys. Descriptive analysis was utilized to analyze the data. The surveys consisted of either nine (actor survey) or ten (audience survey) 5-point Likert style questions that ranged from strongly disagree to strongly agree. There were three demographic questions, three questions related to heart disease and diabetes and one question that asked participants to list one lesson learned from the play. Additional questions were: 1) do you have heart disease, 2) do you have diabetes, 3) what is the number of people in your family with heart disease, 4) list one thing you learned from the play, and 5) additional comments.

Some of the comments were "it helps to share health information", "eat more fruits and vegetables", and "it is truly necessary to eat healthy".

Responses from the surveys were overwhelmingly positive. Questions one through three on the actor surveys and question one through four on the audience surveys differed because they were specific to either the actor or the audience. Ninety-four percent (n=63) of participants were African American, and 6% (n=4) were Caucasian. One hundred percent either *somewhat or strongly agreed* that the story would encourage them to discuss the importance of healthy eating to prevent heart disease with their family, make better food choices, and eat more fruits and vegetables. Findings for questions specific to the actors revealed 100% (n=13) *somewhat to strongly agreed* that they enjoyed participating in the play. The majority of the actor participants, 84% (n=11), *somewhat to strongly agreed* to enjoying helping to write the play, while 16% (n=2) neither agreed nor disagreed. Findings for questions specific to the audience revealed 98% (n=53) either *somewhat or strongly agreed* that they enjoyed the play and 98% (n=53) either *somewhat or strongly agreed* that the story was easy to follow.

#### Discussion

The study began amidst the pandemic and many in the community were dealing with stressors such as the loss of family members from COVID-19, loss of income from job loss, and a fear of going into town and coming in close contact with others. The monthly food deliveries were seen as a welcome relief for many because it meant residents would not have to go into town to the grocery store and risk possible exposure. The health promotion information was well received as community members drove through the food pick-up line. There was also a sense of excited expectation knowing that a community play was going to be performed in the forthcoming spring months. This was the first time a play had been performed in the community and that members of

the community had performed for their peers. The survey data indicated that the town is interested in receiving additional health information presented in this format.

Limitations of the study were that due to COVID-19, the play had to be held outside in the hot weather and the actual community dinner piece of FDT was omitted for safety reasons. Also, because of the outdoor temperature, the discussion portion after the play was omitted. Post play discussions could have provided more in-depth information for the research team regarding planned behavior changes to eat healthy and insight into the understanding of the information. A six-to-eight-week follow-up would have provided insight into behavior changes of fruit and vegetable consumption. Implications for future direction are to utilize the FDT concept for sharing health promotion information in different settings such as school and church.

# Conclusion

Utilizing the FDT Toolkit in the rural community was innovative and fun, especially amid a pandemic where community members were not able to attend church or socialize as they were accustomed to. The citizens of this community were very welcoming to the research team and were excited to partner with the academic institution. Everyone indicated a willingness to participate in future studies. Health promotion education may reduce health risk behaviors such as unhealthy food choices. This type of intervention may serve as an impetus to making better food choices.

## References

- Alabama Demographics. (n.d.). Is Panola the best Alabama city for your business? https://www.alabama-demographics.com/panola-demographics
- Alabama Department of Public Health. (n.d.). *County health profiles 2018*. https://www.alabamapublichealth.gov/healthstats/assets/chp2018.pdf

- American Heart Association. (n.d.). *Health disparities in rural US: Higher coronary artery disease death in women under 65 and people with heart failure.* <u>https://newsroom.heart.org/news/health-disparities-in-rural-us-higher-coronary-artery-</u> *disease-death-in-women-under-65-and-people-with-heart-failure*
- Aune, D., Giovannucci, E., Boffetta, P., Fadnes, L. T., Keum, N., Norat, T., Greenwood, D. C., Riboli, E., Vatten, L. J., & Tonstad, S. (2017). Fruit and vegetable intake and the risk of cardiovascular disease, total cancer and all-cause mortality—A systematic review and doseresponse meta-analysis of prospective studies. *International Journal of Epidemiology, 46*(3) 1029-1056. https://doi.org/10.1093/ije/dyw319
- CardioSmart: American College of Cardiology. (n.d.). *Infographic posters*. <u>https://www.cardio</u> <u>smart.org/topics/decisions/clinicians-start-a-conversation/posters</u>
- Centers for Disease Control and Prevention. (n.d.). *Women and heart disease*. <u>https://www.cd</u> <u>c.gov/heartdisease/women.htm</u>
- Housing Assistance Council. (n.d.). *Persistent poverty*. <u>https://ruralhome.org/our-initiatives/persistent-poverty/</u>
- Karpyn, A. E., Riser, D., Tracy, T., Wang, R., & Shen, Y. (2019). The changing landscape of food deserts. UNSCN Nutrition, 44, 46-53. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/</u> <u>PMC7299236/</u>
- Lloyd, J. (2019). From farms to food deserts: Food insecurity and older rural Americans. *Journal of the American Society on Aging, 43*(2), 24-32. <u>https://www.jstor.org/stable/26760111</u>
- Massachusetts Institute of Technology. (n.d.). *Fresh food for all: Improving access to healthy food in Alabama*. <u>https://dusp.mit.edu/sites/dusp.mit.edu/files/attachments/project/ECN\_repor</u>
  - <u>t\_5.pdf</u>

- McCallum, D. M., Reed, D. R., Claunch, D. T., Davis, C. M., & Conway, M. B. (2021). Farm dinner theater: Testing an innovative health and safety intervention among older farmers and their families. *The Journal of Rural Health*, 1-9. <u>https://doi.org/10.1111/jrh.12601</u>
- Reed, D. B. & Claunch, D. T. (2017). Moving social norms via theater for senior farmers. *Journal* of Safety Research, 60, 17-20. <u>https://doi.org/10.1016/j.jsr.2016.11.002</u>
- Reed, D. B. (2018). *Farm dinner theater toolkit*. <u>https://uky.az1.qualtrics.com/CP/File.php?F=</u> <u>F\_4T9TyPMPaDhjhcx</u>
- Rural Health Information Hub. (n.d.). *Rural hunger and access to healthy food*. <u>https://www.rural</u> <u>healthinfo.org/topics/food-and-hunger</u>
- United States Census Bureau. (n.d.a). *Rural America*. <u>https://mtgis-portal.geo.census</u>.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6
- United States Census Bureau. (n.d.b). *Sumter county, Alabama*. <u>https://data.census.gov/</u> cedsci/profile?g=0500000US01119
- United States Department of Agriculture. (n.d.a). *Documentation*. <u>https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/</u>
- United States Department of Agriculture. (n.d.b). *Rural poverty and well-being*. <u>https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/ - geography</u>
- University of Alabama (n.d.). *Alabama black belt counties*. http://www.uaced.ua.edu/uploads/1/9/0/4/19045691/about the black belt.pdf
- Virani, S. S., Alonso, A., Aparicio, H. J., Benjamin, E. J., Bittencourt, M. S., Callaway, C. W., Carson, A. P., Chamberlain, A. M., Cheng, S., Delling, F. N., Elkind, M. S. V., Evenson, K. R., Ferguson, J. F., Gupta, D. K., Khan, S. S., Kissela, B. M., Knutson, K. L., Lee, C. D.,

Lewis, T. T., Liu, J., Loop, M. S., ... Tsao, C. W.; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. (2021). Heart disease and stroke statistics—2021 update: A report from the American Heart Association. *Circulation, 143*(8), e254-e743. https://doi.org/10.1161/CIR.0000000000000950

Wickman, C. A. & Carbone, E. T. (2018). "Just say it like it is!" Use of community-based participatory approach to develop a technology-driven food literacy program for adolescents. *International Quarterly of Community Health Education, 38*(2), 83-97. <a href="https://doi.org/10.1177/0272684X17749572">https://doi.org/10.1177/0272684X17749572</a>