



The Changing Face of the Jackson Heart Study

Dr. Clifton Addison



The Jackson Heart Study (JHS) began as a unique and historic arrangement in medical research and included a collaboration of three institutions. Jackson State University (JSU Coordinating Center), Tougaloo College (Undergraduate Training Center), and The University of Mississippi Medical Center (UMMC Exam Center) operated under one roof at the Jackson Medical Mall. When the first contract period ends on May 31, 2013, it will give rise to a new dawn in JHS operations. The new contract period will abolish the historic JHS format with the three-institution partnership. The National Heart, Lung, and Blood Institute's (NHLBI) Request for Proposals (RFP) for the new contract period scheduled to begin June 1, 2013 called for a modification of the agreements of the first phase. The NHLBI invited institutions from across the country to submit proposals to operate five separate centers: Field Site Center, Coordinating Center, Community Outreach Center, Undergraduate Training

and Education Center and Graduate Training and Education Center. The new RFP gave other institutions the opportunity to submit proposals for each new center and to compete with JSU, Tougaloo College and UMMC. The institutions with the winning proposal will be awarded the contracts to operate the five centers that will make up the JHS from June 2013 and beyond.

The local institutions decided to compete in the following areas: UMMC applied for funding to operate the Coordinating Center and Field Site Center; JSU applied for the Community Outreach Center and Graduate Training and Education Center funding. Tougaloo College applied for funding to operate the Undergraduate Training and Education Center.

Whatever the final decision, the JHS staff extends appreciation to the communities of Hinds, Madison, and Rankin Counties for their unselfish support and their unfaltering contributions to medical research, science and the future health of this region, the nation, and the world. Thank you and continued blessings to you all!

Opportunity for Expanding Community Involvement in the JHS 2013 and Beyond

Dr. Clifton Addison

The Jackson Heart Study (JHS) has embraced a community-based participatory research (CBPR) approach that provides avenues for community residents to become actively involved in the full range of research-related activities. Going forward, this emphasis on community involvement will be intensified as the new JHS Community Outreach Center continues to open doors to the community, especially

those who may have an interest in study management and health education/health promotion. Opportunities are available for community participation in research activities from idea conceptions, research designs, study procedures, data analysis and interpretation, study conclusions, and more importantly, dissemination and communication of study results. We will intensify our collaborative efforts to influence positive changes in community

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Lay Title: Health Risks by Education and Income in Blacks

DeMarc A. Hickson, PhD, MPH, Ana V. Diez Roux, MD, PhD, MPH, Samson Y. Gebreab, PhD, MS, Sharon B. Wyatt, RN, PhD, Patricia M. Dubbert, PhD, Daniel F. Sarpong, PhD, Mario Sims, PhD, and Herman A Taylor, MD, MPH

Introduction: Allostatic load is social and environmental stressors can result in negative changes of many systems in the human body. Allostatic load is related to many disease-related processes, including heart disease. There are many reasons for looking at socioeconomic patterns of allostatic load, especially those in Blacks. Studies show Blacks have higher allostatic load scores. Blacks are more often exposed to social and economic stress than Whites. This states that allostatic load plays a bigger role in the socioeconomic patterns of health outcomes in Blacks than in Whites.

Purpose: The study looks at the social patterns of allostatic load in Blacks adults.

Method: The Jackson Heart Study is a single-site study of the cause of heart disease in Blacks. Not all of the participants who finished the home interview and baseline exam were included. 1253 participants were not included because of missing biomarker or

covariate information. 4048 participants were left for analysis. Nine biomarkers were selected for study. These nine were chosen because of their use in prior studies of allostatic load, as well as, their availability in the Jackson Heart Study. Trained Black interviewers gave the socioeconomic status surveys during the clinical examination. Health behaviors such as cigarette smoking, physical activity, dietary intake, alcohol consumption, and sleep duration were on the survey as covariates.

Conclusion: The study sample had 2564 women and 1484 men. The average age of participants is 54. The average age of females was higher than the average age of males. Only in women was education and income both freely and inversely related to allostatic load. This inverse relationship was stronger for income than for education.

Implications: The findings of this study support the hypothesis for Black women. The support for the hypothesis is less steady in Black men.

Lay Title: Pericardial Fat vs. Impaired Lung Function

DeMarc A. Hickson, Ph.D, MPH; Jiankang Liu, MD, PhD; Aurelian Bidulescu, MD, PhD, MPH; Cecil M. Burchfiel, PhD, MPH; Herman A. Taylor, MD, MPH; and Marcy F. Petrini, PhD, FCCP

Introduction: This research was done with the Jackson Heart Study to evaluate the relationship between obesity and the heart to impaired lung function. Pericardial fat is a covering layer of the heart and fat that surrounds the pericardium; this fat has been shown to cause abnormalities in heart structure or function. Impaired lung function is unhealthy breathing patterns related to increased rate and decreased depth of breathing. It was hypothesized that pericardial fat may cause impaired lung function.

Purpose: This research examined the relationship between pericardial fat and lung function in Blacks. The key source was to analyze the cross-sectional relations between the pericardial fat and the lungs.

Method: The Jackson Heart Study began in 2000, with 5,301 participants, who underwent several examinations. Participants were excluded on accounts of missing adiposity measurements, spirometry did not meet

American Thoracic Society recommendations, inadequate pericardial fat volumes, and an incomplete profiles. With these exclusions, it was cross-sectional associations of the fat surrounding the heart volumes were studied in 1,293 people in the Jackson Heart Study.

Conclusion: Pericardial fat is often known to be associated with lower lung function in middle aged adults. Pericardial fat was positively associated with the odds of a restrictive lung pattern. Adiposity measurements were inversely related to lung function. With this research that has been conducted, more research will be required to totally understand if pericardial fat causes respiratory problems.

Implications: From the research that was obtained during this study and compared to previous research findings, it could be concluded that fat of some sort causes respiratory impairments.

JHS Bulletin Board

♥ JHS Celebration of Life "Block Party": February 23, 2013.

For more information: Call Darcel Odom 601-979-8709,
Marty Fortenberry 601-979-8736 or Alice Smith 601-979-8759.

♥ Congratulations! JHS/Tougaloo Scholars presented at the Annual Biomedical Research Conference for Minorities Students (ABRCMS) in San Jose, California in November, 2012.

Want to know more? Contact Beverly Thomas at 601-977-7816.

♥ Participant Update

■ Approximately 81% of participants returned for Exam 3.

■ **Courtesy Reminder: Exam 3 ended on January 31, 2013.**

♥ JHS Proposal & Funding Update:

■ Renewal Proposals have been submitted to NHLBI by JSU, Tougaloo College, and UMMC to continue the funding of the Jackson Heart Study.

The Jackson Heart Study (JHS) extends heart-felt thanks to the tri-county (Hinds- Madison-Rankin) communities and participants for supporting the JHS the past 13 years. We have asked so much from you and you have given so much more back.

Opportunity for Expanding Community Involvement in the JHS 2013 and Beyond, continued from page 1

health, health delivery systems, health-related programs policies.

The strength of this collaboration lies in the unique opportunity it offers to enlist full community cooperation in building communication, trust and capacity which can lead to improving community health and ultimately reducing health disparities. Community members are invited to participate as members of scientific writing teams, operating JHS committees, and in JHS sponsored

presentations, workshops, and training. Research Training Appointments (RTAs) are also available to qualified applicants to enhance their career development in epidemiological, biological, or behavioral research of risk factors and causes of cardiovascular diseases in African Americans. Community residents can take advantage of the invitation to spend time with JHS investigators and staff, learn about research, and provide direct input into the process.

From the Bolton/Edwards Community Health Advisors (CHAs)

Ms. Oceal Rozell and Ms. Alfenette Robinson, Bolton/Edwards Community Health Advisory Network (CHAN) President and member, shared the opinion that by learning of so many diseases through the Jackson Heart Study (JHS), they are more informed and aware of the physical changes in their bodies. Collectively, they learned that diseases can be inherited and it is important to change eating habits, exercise more, and refrain from sitting around watching TV and playing video games on a regular basis. According to Ms. Robinson, "Sometimes it is not what we eat; it is how much we eat. With the knowledge I gained through JHS, I can spread the good news. Also, with what I know, I may be able to prevent some early diseases by talking with people, starting a walking group and cooking without a lot of salt and fat."

Some of the community people had never heard of the Community Health Advisors Network (CHAN). They were informed of the benefits of the Bolton/Edwards CHAN and some of them wanted to join. Ms. Robinson was one of the first to join. "I just love JHS and in the future, I would like more health fairs for the community and to be an example for the younger kids to get off the computers, cell phones and go outside for at least 45 minutes a day. We need to be an example so our children and grandchildren won't have so many diseases so early."



From the Canton Community Health Advisors (CHAs)

Mrs. Bobby Jones, President of the Canton Community Health Advisors Network (CHAN), stated that her



involvement in the CHAN has impacted her life. "By choosing a healthier lifestyle, I'm in good health. My family and community are eating foods that are low in fats and rich in nutrients."

They are eating more fruits, vegetables and whole grains. She feels the most important aspect is to drink pure, clean and refreshing water.

Mrs. Jones feels that her role as president will enhance the knowledge of the community about cardiovascular disease. As she continues to work with other CHA members, they will come up with different methods of educating the community about living healthier and knowing their risk factors. Two cardiovascular disease-related activities such as health

fairs/seminars and/or special presentations by health professionals should be sponsored each year.

During her tenure with the Jackson Heart Study (JHS), activities such as the three mile walk quarterly, *Construct Health Seminars and Organize Exercise Programs* with different organizations, were implemented. The actions Mrs. Jones took to change the personal, social and environmental factors related to improving health outcomes included being consistent, continuing to pass out educational materials, providing activities that are age appropriate and emphasizing the seven steps to a healthy heart.



The Canton CHAs are working together to remove barriers to good health and improve overall health in the community with kindness, compassion, education and leadership.

From the Clinton Community Health Advisors (CHAs)

The Clinton CHAs have strived to take a lead role in providing health awareness and prevention information and activities to their community. They have accomplished this by conducting health fairs and forums that address health risk factors for cardiovascular disease such as hypertension, diabetes and



cholesterol. Their membership is comprised of retired educators, community advocates, and healthcare professionals who volunteer to ensure that the senior citizens of Clinton have access to the tools they need to live healthier lives. Through their affiliation with a local community organization, Clinton Community Christian Corporation (4Cs), they are provided a platform to utilize their respective skills and knowledge to promote the Jackson Heart Study (JHS) and enhance the health awareness knowledge of the senior citizens.

Mrs. Tommie Winters, Clinton CHAN President, believes the members have a personal responsibility to their community to take the lead in providing heart healthy information. "Being involved as a JHS CHA has enabled me to understand that it is what I do that has a greater impact on cardiovascular disease/stroke prevention than what I say. Therefore, when I and my

fellow CHAs shop for food, we read the labels to identify how much sodium, sugar, proteins, etc., are in the foods we consume. We use this information to promote healthy eating habits in our community." Mrs. Winters believes the Clinton CHAs should continue to enhance their ability to serve their community by receiving more hands on training.

From the Rankin Community Health Advisors (CHAs)

Ms. Augustine Kelly feels that her involvement as a Jackson Heart Study (JHS) CHA has helped her tremendously. "The initial training taught me so much; particularly, to know my numbers". She has hypertension, diabetes and other complications that accompany these diseases and knowing her numbers and other warning signs helped her to manage those diseases. Her involvement with the Rankin CHAs also helped her to assist others in her church and community. Their participation with the JHS at health fairs, community walks, and their annual Christmas dinner allowed them the opportunity to obtain additional health information and to ask the professionals meaningful questions.



Ms. Kelly has taken action by sharing with her

community ladies' club the knowledge that she gained.

She has also invited Darcel Odom, JHS Health Educator, to come and share more information. She continues to participate in the monthly meetings which enable the ladies to learn from each other when they discuss their eating habits, count calories and read labels, and other informative heart healthy measures.



Ms. Kelly deviated from her regular exercise routine and participated in the early morning walks during the Breast Cancer Awareness Month. The Rankin County CHAs will strive to keep the community aware of their presence and availability.

From the Jackson Community Health Advisors (CHAs)

The Jackson Community Health Advisors Network (CHAN) was organized in 2003. Since its inception as a community component of the Jackson Heart Study (JHS), the group has organized many activities related to heart health, healthy eating habits, and walks to bring awareness to the community. Some of those activities included participating in the "Red Hat" Society; participating in Girl Scouts activity and Mother/Daughter Brunch. Each of the activities centered on health and how we as a community can improve our own health and that of others.

The CHAs have conducted quarterly blood pressure checks in the Jackson Medical Mall, disseminated health literature and answered questions. During our annual walk, we had the privilege of partnering with the Packard Employee Retirees group. The hope of the Jackson CHAs is to continue to serve our Jackson community so that we all can become healthier and live longer productive lives.

Mrs. Earlean Fields, former CHAN President, has been instrumental in helping to change lives by telling her personal story. To this day, she continues to talk to

community people about cardiovascular risk factors. She suffered a heart attack in 1998 and had to adjust

her lifestyle and change the way she cooks. She is always informing people that they can still enjoy food without adding all the grease and lard

because it can lead to blocked arteries which cause heart attacks.

Mrs. Fields enjoyed every moment of being the Jackson CHAN President and working with the JHS staff, especially LaShondra Collins. She stated that as president of the Jackson CHAN, it was important to be aware of what was going on at the JHS and to "be in the know." Although Mrs. Fields is no longer the Jackson CHAN President, she will continue to attend the meetings and participate in the activities whenever possible.



JHS Annual Family Reunion

By Debra Douglas, LMSW

The Jackson Heart Study (JHS) celebrated its 12th Annual Family Reunion On September 22, 2012. There were over 100 people in attendance and the theme was “Get Your



Move On.” Mrs. Belinda Johnson, our co-worker and a participant, served as Mistress of Ceremony. She was followed by her husband, Mr. William Johnson, Jr., also a JHS participant, with an invocation. Mrs. Debra Wilson, Surveillance and Retention Manager, greeted everyone with a warm welcome.

Ms. Cheryl Nelson, JHS Project Officer, National Heart, Lung, and Blood Institute (NHLBI), extended a hearty greeting to the audience. Mrs. Darcel Odom, Health Education Specialist, discussed the Red Hat

Campaign which will involve visits to local churches to promote the JHS. Dr. Herman A. Taylor, Jr., JHS Director and Principal Investigator, gave a “Study Update” which included remarks on the current state of the study as well as its future.

The highlight of this year’s event was the physical activity demonstration by fitness expert, Rochelle Culp. She was successful at getting the entire audience on their feet and involved in her interactive fitness routine.

The best part of her presentation was the fitness tips that she gave about simple but effective exercises that can be done at home, the office, and even at church.

The feedback from the audience regarding this year’s program was very positive.



Jamaican Jerk Chicken

The spices and peppers in this dish will transport you to a whole new taste.

- ½ teaspoon cinnamon, ground
- 1½ teaspoons allspice, ground
- 1½ teaspoons black pepper, ground
- 1 tablespoon hot pepper, chopped
- 1 teaspoon hot pepper, crushed, dried
- 2 teaspoons oregano, crushed
- 2 teaspoons thyme, crushed

- ½ teaspoon salt
- 6 cloves garlic, finely chopped
- 1 cup onion, puréed or finely chopped
- ¼ cup vinegar
- 3 tablespoons brown sugar
- 8 pieces chicken, skinless (4 breasts, 4 drumsticks)

1. Preheat oven to 350 °F. Wash chicken and pat dry.
2. Combine all ingredients except chicken in large bowl. Rub seasonings over chicken and marinate in refrigerator for 6 hours or longer.
3. Space chicken evenly on nonstick or lightly greased baking pan.
4. Cover with aluminum foil and bake for 40 minutes. Remove foil and continue baking for an additional 30–40 minutes or until the meat can easily be pulled away from the bone with a fork.

Yield: 10 servings
Serving Size ½ breast or 2 small drumsticks

Calories 113
Total Fat 3g
Saturated Fat 1g
Cholesterol 49 mg
Sodium 161 mg

Total Fiber 1g
Protein 16g
Carbohydrates 6g
Potassium 192 mg

Heart Healthy Home Cooking African American Style With Every Heartbeat Is Life

U. S. Department of Health and Human Services

National Institutes of Health

National Heart, Lung, and Blood Institute

<http://www.nhlbi.nih.gov/health/public/heart/other/chdblack/cooking.pdf>



Save the Date! Saturday, February 23, 2013

Jackson Heart Study

13th Annual “Celebration of Life”

JHS COMMUNITY BLOCK PARTY

Health Screenings, Door Prizes and More!

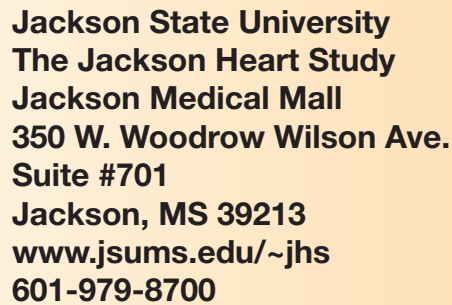
Guest Speaker: Mr. Robert Pugh, Executive Director
Mississippi Primary Health Care Association
“The Affordable Care Act: An Overview”

8:00 a.m.–12:00 Noon
Jackson Medical Mall
UMMC Conference Center

*****Enter Jackson Medical Mall from Livingston Road Gate*****

For additional information, please contact Darcel T. Odom 601-979-8709

Breakfast snacks and lunch will be served!



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The JHS Heartbeat Newsletter is published semi-annually. Its intent is to enhance health awareness and provide an understanding of cardiovascular related diseases including diabetes, hypertension, strokes, cholesterol, physical activity and nutrition through research findings, articles, lay summaries and reviews. The newsletter also facilitates communication among the JHS staff and collaboration with investigators, cohort members and partnering institutions.

Request for information is being solicited for the upcoming issues of the JHS Heartbeat Newsletter. The submission deadline for the Summer Edition is March 15 and the Winter Edition is September 15.

Submissions should be approximately 250 words or less. Relevant pictures, illustrations and/or charts may be submitted with the articles. Information regarding upcoming educational conferences and/or meetings is also requested. All material information is subject to copyediting. Include the author/agency's full name, credentials, mailing address and website (if applicable), telephone and fax number and email address. The use of all photos is subject to consent approval. All information should be emailed to Dr. Brenda Jenkins at brenda.w.campbell@jsums.edu or mailed to JHS Heartbeat Newsletter, 350 W. Woodrow Wilson Drive, Suite 701, Jackson, MS 39213.

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