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This project seeks to add to research knowledge that impacts racial disparities in prostate cancer by examining how prostate cancer experience of fathers influence the prostate health preventive patterns of their adult sons. The study will combine qualitative and quantitative research techniques to assess the knowledge, attitudes, preventive health practices, and prostate cancer related informed decision making of adult sons of prostate cancer survivors and how these factors relate to the diagnostic pathways, treatment experience, and quality of life of their fathers.

1. Investigate the effects of race, economic status, and psychosocial factors, on the quality of life of men diagnosed with prostate cancer. 2. Investigate psychosocial factors that influence help seeking behavior among men who are diagnosed with prostate cancer. 3. Examine the effects of informed decision making and knowledge on prostate cancer treatment decision making. Adult sons of prostate cancer survivors will complete a structure questionnaire to assess their prostate cancer health seeking behavior.
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INTRODUCTION:
[Narrative that briefly (one paragraph) describes the subject, purpose and scope of the research.]

Research Question:

This project seeks to add to available research on racial disparities in prostate cancer by examining health patterns among sons of fathers with the disease. The study will combine qualitative and quantitative research techniques to: assess the knowledge, attitudes, and preventive practices of adult sons of men with prostate cancer and how these relate to the diagnostic pathways, treatment experiences, and quality of life of their fathers who participated in the study, Disparities in Prostate Cancer Treatment and Quality of Life, A.K.A. “The Fathers Study,” which was conducted at Johns Hopkins University where Thomas LaVeist, Ph.D. served as principal investigator and Daniel L. Howard, Ph.D. was the subcontract PI. In doing so, the “Sons Study” will examine the following hypotheses: (1) Among adult sons of prostate cancer patients, those who have more knowledge of prostate cancer risks and consequences will be more likely to regularly utilize prostate cancer screening. (2) Sons who report close relationships with their fathers will be more likely to regularly utilize prostate cancer screening. (3) Sons whose fathers report a high disease burden will be less likely to regularly utilize prostate cancer screening.

Rationale:

The burden associated with prostate cancer fall disproportionately on African American men. The prostate cancer incidence rate among African American (AA) men is 55% greater than that of Caucasian (CA) men and, according to the National Cancer Institute (NCI) state cancer profiles, the mortality rate is almost three times that of CA men (73.9 per 100,000 AA / 25.6 per 100,000 C). Genetic and dietary factors have been identified in explaining a portion of the excess burden experienced by AA men, yet we have been unable to identify risk factors that are both of substantial magnitude and amenable to preventive intervention. AA men are less likely to be enrolled in clinical trials and there are indications that supportive services may not be as readily available to them. While AAs have a substantially worse profile with regard to prostate cancer, differential use of preventive health behaviors such as prostate cancer screening may attenuate the racial disparities in prostate cancer outcomes, yet, research examining the factors associated with such behaviors is underdeveloped. Family history is one of few predictors of elevated prostate cancer risk. Accordingly, the proposed study will focus on the sons of men with prostate cancer, and will examine the roles of informed decision-making, knowledge on utilization of prostate cancer screening procedures, individual socioeconomic characteristics, characteristics of the father-son relationship, and characteristics of the father's prostate cancer experience as they may be associated with sons’ consequent use of prostate cancer preventive/early detection behaviors.

The study will combine qualitative and quantitative research techniques to assess the knowledge, attitudes, and preventive practices of adult sons ("sons") of men with prostate cancer ("fathers"). It will be conducted in parallel with an examination of men with prostate cancer ("The Fathers Study"), the goals of which are (1) to investigate the effects of race, economic status, and psychosocial factors on the quality of life of men diagnosed with prostate cancer; (2) to investigate psychosocial factors that influence help seeking behavior among men who were diagnosed with prostate
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cancer; and (3) to examine the effects of informed decision-making and knowledge on prostate
cancer treatment decisions-making. Correspondingly, the participants in this study (“The Sons Study”) will be the adult sons of men with prostate cancer. Equal numbers of African American and white males with prostate cancer will be identified for The Fathers Study. These men, in turn, will be asked to identify their sons, who will be contacted for participation in this, The Sons Study. The study consists of a telephone interview.

For the parent study (“The Father’s Study”), Dr. Thomas LaVeist is the principal investigator and Dr. Daniel L. Howard is the subcontract PI, while Dr. Daniel L. Howard is the PI and Dr. Thomas LaVeist is the subcontract PI for the companion study (“The Sons Study). Dr. Howard was formerly at the Institute for Health, Social, and Community Research (IHSCR) Center for Survey Research (CSR) at Shaw University in Raleigh, NC. Because there was a two-year delay in getting the grant transferred from Shaw University to Meharry, Johns Hopkins took over the administration of the Sons Study in an effort to keep datasets from both The Fathers Study and The Sons Study together. Dr. Daniel Howard has recently resigned from Meharry Medical College and is no longer the PI of The Sons Study. Dr. Flora Ukoli has agreed to replace Dr. Howard as PI on this project. Dr. Ukoli is an established investigator, a prostate cancer epidemiologist with over twenty years of experience in the field of cancer prevention. She has served as principal investigator on numerous DOD and NIH prostate cancer and cancer prevention studies. Dr. Ukoli has numerous publications in the prostate field. Her appointment as PI will enhance the project, and ensure the project goals and objectives are met. As with The Fathers Study, the Sons survey will be conducted at CSR which is now located at Johns Hopkins Bloomberg School of Public Health (JHSPH) located in Raleigh, NC. The Sons Study dataset used for analyses will be housed at the JHSPH located at 624 N. Broadway, Hampton House Suite 441, Baltimore, MD site under the supervision of Dr. LaVeist, which is also the location of the parent study dataset.

The purpose of the study is to identify factors that influence prostate cancer prevention/early
detection behaviors among sons of men with prostate cancer. We will prospectively recruit 315
white and 315 African American sons of men who enter the North Carolina Central Cancer Registry
(NCCCR) by obtaining contact information for the sons from the fathers that participate in the
Fathers Study. To date, we have been able to recruit 891 fathers to participate in the Fathers Study;
therefore, the 630 sons will be recruited from this pool.

We will employ appropriate statistical procedures to analyze data obtained from survey responses
and address the study’s major hypotheses. Descriptive statistics including means and percentages
will be examined. Regular use of prostate cancer screening will be assessed using logistic regression
and generalized estimating equations to assess trends over time. Model selection procedures will be
employed to determine optimal set of predictors for our outcome. All tests will be two-sided with
and significance will be determined by a p-value less than 0.05. All analyses will be conducted
Statement of Work:

**Task 1: Start-Up Phase and Plan Development** (Month 1 – 4)

- Complete a sub-contract with Johns Hopkins University.
- Secure IRB approval at Meharry Medical College and at Johns Hopkins University.
- Interview, hire and train student research interviewers (Ms. Carol Burt) to recruit, consent, and conduct the study interviews.

  **Deliverables:**
  - Sub-Contract to JHU
  - IRB Approvals from both institutions
  - Trained interviewers.

**Task 2: Data Collection** (Month 5 – 8)

- Recruiting and interviewing study participants.
- Complete data entry of all interview information collected. (Ms. Carol Burt).

  **Deliverables:**
  - Recruitment brochure
  - Complete data collection program & Complete data file of study participants.

**Task 3: Report and Presentation of Program Outcome** (Month 9 – 12)

- Data analysis, result interpretations, and manuscript development.

  **Deliverables:**
  - Poster & Manuscript and Annual Reports & Annual DOD Report
KEY RESEARCH ACCOMPLISHMENTS:
[Bulleted list of key research accomplishments emanating from this research.]

This program did not meet any of its research goals in the previous year because of the sudden departure of the original PI, Daniel Howard, Ph.D. The Director of Research at Meharry, Mr. G. Ballard and Dr. Flora Ukoli arranged the administrative process to get this project back on track. The following processes were completed:

1. Met with the PI from JHU, T. LaVeist, Ph.D., to agree on a working plan.
2. Secured a Non-Cost extension approval from DOD.
3. Obtained IRB approval at Meharry.
4. Ensured that a definitive IRB approval was obtained at JHU.
5. Developed a working budget and sub-contract with JHU.
   The PI (Ukoli, F) and Co-PI (LaVeist, P) will visit the study coordinator and her student research interviewers at Shaw University, NC, August 14, 2014.

REPORTABLE OUTCOMES:
[Provide a list of reportable outcomes that have resulted from this research to include:]

Non-Cost Extension request letter
IRB approval: MMC
IRB approval: JHU
Revised study brochure
Trained study interviewers: 3
Participants contacted: 91
Participants enrolled: 77
Interviews completed: 11

CHALLENGES:

1) The administrative process to establish a sub-contract with JHU was protracted such that JHU delayed signing the sub-contract until May 30, 2014. This led to a delay in project initiation by the coordinator (C. Burt). Research interviewers were trained and they started data collection in July.
2) Over 50% of the contact information of potential participants was no longer valid. This may be due to the lapse in years since the contact information was collected from their fathers in a previous study (PI: LaVeist).
3) Some of the participants refused to participate for two main reasons:
   a. Do not want to participate in research
   b. Do not want to talk about prostate cancer
   Some of them requested that their names be removed from the call list.
STRATEGIC PLAN:

The PI (LaVeist) has obtained IRB approval to contact the participants in his previous research project to obtain the most current contact information of their sons. We should be able to reach more potential participants and improve the number of participants recruited into the study within the next 6 months.

CONCLUSIONS:

[Summarize the results to include the Importance and/or implications of the completed research and when necessary, recommend changes on future work to better address the problem. A "so what section" which evaluates the knowledge as a scientific or medical product shall also be included in the conclusion of the report.]

Participant recruitment and data collection has started and is moving in the right direction. It will be highly appreciated if the Department of Defense can approve a second non-cost extension to allow us complete the study as planned, especially now that we have overcome all the administrative and personnel change challenges.

REFERENCES: [List all references pertinent to the report using a standard journal format (i.e. format used in Science, Military Medicine, etc.).]
Prostate Cancer

Prostate cancer is the most common cancer and the second leading cause of cancer death among men.

Risk Factors

Family History

- If a man has one close relative with prostate cancer, his risk is twice as high as the general population to develop this condition.
- If he has two close relatives, his risk increases by five-fold.
- If he has three or more, it is increased by eleven-fold.

Race

- African-American men have the highest prostate cancer incidence in the world.
- African-American men are 2.4 times more likely to die from prostate cancer than Caucasian men.

Increasing Age

For all men the risk of prostate cancer increases with age, especially after age 50. However, prostate cancer may occur earlier and be more aggressive among African-American men.

Other possible risk factors include obesity, lifestyle and environmental exposure.
About the Study

The RWJF Center for Health Policy at Meharry Medical College, the Hopkins Center for Health Disparities Solutions and the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins University have teamed up to form the Meharry-Johns Hopkins Center for Prostate Cancer Research.

We want to better understand how personal experience and risk perception impact lifestyle choices and screening behaviors of adult men. We believe that, by working together, we can find ways to reduce the impact of prostate cancer on men and their families for current and future generations.

This study is not a clinical trial. It is a survey asking for men’s responses to questions. We will not ask participants to take medicine or drugs, give blood or other such medical specimens and, we will not give any kind of medical treatment.

Study Participants

The Meharry-Johns Hopkins Center for Prostate Cancer Research is working with the North Carolina Central Cancer Registry to identify men who might be willing and able to participate in this study. All of their personal information will be kept and secure.

- Participants include men over the age of 34 who have not been diagnosed with prostate cancer.
- Each participant will receive a call from a trained interviewer who will ask questions about his health, health care, diet, beliefs and interpersonal communication with friends and relatives about prostate cancer.

Visit www.meharryhealthpolicy.org for more information.

By working together, we can find new and better ways to minimize the impact of prostate cancer on future generations and improve the lives of men.

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