A Community-Academic Partnership to Understand the Association Among Health Status and Senior Services Utilization to Improve Nutrition and Blood Pressure Control for Low Income Seniors Aging in Place

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OBJECTIVES/SPECIFIC AIMS: The Rockefeller University Center for Clinical and Translational Science (RU-CCTS), Clinical Directors Network (CDN), and Carter Burden Network (CBN), a multi-site senior services organization serving East Harlem, NY, formed a community-academic research partnership to characterize the health of the CBN seniors (many who are racial/ethnic minorities, low-income, and suffering from multiple chronic conditions) and to explore the use and associations of a measure of overall health status and frailty in this population. A simple validated measure of health status could standardize and streamline community-based translational research to study the impact of CBN’s services on health outcomes. The CCTS-funded Pilot Project aims to: 1) Engage CBN seniors and stakeholders in priority-setting, joint protocol development, research conduct, analysis and dissemination; 2) Characterize the health status of the CBN seniors using validated measures; 3) Establish an electronic database infrastructure for current and future research; 4) Understand how health and senior activities information can be used to implement programs to improve senior health and well-being. METHODS/STUDY POPULATION: 1) We used Community Engaged Research Navigation (CEnR-Nav) methods to facilitate partnership development, and to engage CBN seniors and stakeholders in each step of the research; 2) Research staff conducted recruitment, informed consent, and physical assessments (e.g., pulse, blood pressure, BMI); and administered validated surveys to collect health status information. 3) Data were captured on a REDCap-based platform. The primary outcome, frailty, was measured by the validated Short Physical Performance Battery (SPPB). 4) Secondary outcomes include the association of use of services/activities with the primary outcome. Research participants consented to sharing of their health, demographic and services utilization data compiled by CBN staff and the NYC Department for the Aging (DFTA). DFTA provided comparison datasets of de-identified health and demographic data for clients attending other NYC DFTA-funded senior centers. RESULTS/ANTICIPATED RESULTS: 1) 43 residents and stakeholders engaged in partnership-building, study design and implementation. 2) 218 participants from two senior centers were enrolled. Mean age, 68 ± 11 years; 58% Hispanic; 33% African American, 23% White, 1% Asian, 18% Unknown, 17% Other; 69% reported <$20000 annual income; 40% had not completed high school; 30% scored as moderately or severely frail; 83% were overweight or obese; and 33% reported a history of diabetes. 84% had uncontrolled high blood pressure; many participants were previously aware of their hypertension diagnosis. 3) A REDcap database was developed to store historical and prospective data. 4) Across frailty categories, there was a significant difference in utilization of non-meal (p = 0.0237) and meal services (p = 0.0127) and there was an inverse proportional relationship between the number of meal and non-meal visits, and frailty. Additional associations among health status measures (e.g., SPPB, demographics, biological measures; pulse, blood pressure, BMI; psychosocial and nutritional scales) and CBN service utilization (i.e., meals vs. non-meals activities) will be presented. DISCUSSION/SIGNIFICANCE OF IMPACT: We developed a community-academic research partnership, infrastructure and capacity, built through our Community-Engaged (CEnR-Nav) model, to conduct a pilot study characterizing the health status and services utilization of low-income minority seniors. Our pilot study identified an urgent health priority, uncontrolled hypertension in 84% of CBN’s seniors. We then leveraged the team’s expertise and CBN’s meal services program to develop a research proposal for external funding to conduct a community-based multi-component intervention study. Replacement of a typical Western diet with the Dietary Approaches to Stop Hypertension (DASH) diet has been proven to reduce blood pressure in hypertensive and normotensive individuals in as little as 14 days, yet effective implementation has...
A TL1 Team Approach to Examine Rural Tobacco Users’ Barriers to Participating in Research
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OBJECTIVES/SPECIFIC AIMS: Our overarching theoretical framework is the health belief model (HBM). Guided by HBM, we aim to identify rural adults’ perceived barriers and motivations to participating in research. Specifically, our research questions are listed below. RQ1: What socio-cultural factors influence rural tobacco users’ intentions to a) participate in research studies and b) undertake tobacco cessation? RQ2: What bio-psychological and behavioral factors influence rural tobacco users’ intentions to a) participate in research studies and b) undertake tobacco cessation? RQ3: How do rural tobacco users perceive citizen scientists as disseminators of a) tobacco cessation and b) recruitment messages? METHODS/STUDY POPULATION: In Phase I of this multi-stage project, we are conducting in-depth interviews with approximately 30 tobacco users in rural Florida. The interview consists of semi-structured questions and multiple validated questionnaires. Specifically, we ask a series of questions about participants’ barriers to participating in research. Additionally, we include questionnaires on participants’ tobacco use history, nicotine dependence, motivation to quit, and willingness to participate in research studies. RESULTS/ANTICIPATED RESULTS: This study consists of two main phases. Data collection for Phase 1 of the study is ongoing, and we will discuss these recent findings. We anticipate data collection and data analysis to be finalized by May, 2019. Beginning in August 2019 through August 2020, we will focus on Phase II, which entails designing and implementing an intervention to increase rural tobacco users’ willingness to participate in research. Given existing literature on other underrepresented groups in research, we anticipate that rural tobacco users will express logistical barriers, such as transportation and time, prevent them from participating in research. Additionally, we anticipate these individuals may have socio-cultural barriers to participating in research, including distrust in the medical system and apprehension over discipline-specific terminology. DISCUSSION/SIGNIFICANCE OF IMPACT: The results of this formative research will be critical to our development of a targeted intervention to increase rural tobacco users’ participation in research. Additionally, our interdisciplinary and community-based approach in this study acknowledges the importance of involving the target population in the research process, which is in line with NIH’s updated model of translational research. We will discuss the process of collaborating with extension agents in rural counties in Florida to reach underrepresented communities.