Facilitators and barriers to health promotion in African-American adults: a qualitative systematic review protocol

Taryn Y. Eastland1,2, Elaine C. Hardy3

1College of Nursing, Purdue University Northwest, Hammond, Indiana, USA, 2The Indiana Center for Evidence-Based Nursing Practice: a Collaborating Center of the Joanna Briggs Institute at Purdue University Northwest College of Nursing, Hammond, Indiana, USA, and 3College of Nursing, University of Illinois, Peoria, Illinois, USA

Review question/objective: The objective of this review is to identify, appraise and synthesize the best available qualitative evidence on the barriers and facilitators to participation in health-promoting behaviors as experienced by African-American adults. More specifically, this review will systematically examine scientific literature for the purpose of addressing the following questions:

- What do African-American adults describe as barriers and facilitators to their experience of increasing physical activity?
- What do African-American adults describe as barriers and facilitators to their experience of increasing fruit and vegetable consumption?
- What do African-American adults describe as barriers and facilitators to their experience of participating in cancer screening?

Keywords: African-American; cancer screening; fruit and vegetable consumption; health promotion

Background

According to the United States Census Bureau, African-Americans represented only 13.2% of the population in 2013.1 Yet, as a group, African-Americans have the poorest health status indicators in the nation. The health disparities between African-Americans and other racial populations are striking in life expectancy, death rates and risk for conditions.2 Implementation of health-promotion strategies such as increasing physical activity, increasing fruit and vegetable consumption and participating in cancer screening could reduce these rates.3 However, African-American participation in physical activity, nutritional behaviors and cancer screening remains inadequate.4 There is a need to explore the barriers and facilitators to participation in these health-promoting behaviors from a qualitative perspective. It is essential to identify the challenges and strengths experienced by African-Americans to adequately address the disparity.

Physical activity

The health benefits of regular physical activity have been well established in the literature. Strong evidence demonstrates that when compared with their less-active counterparts, more active adults have lower rates of all-cause mortality, chronic disease and various types of cancer.5 The Center for Disease Control and Prevention recommends that adults participate in 2 h and 30 min of moderate-to-intensive aerobic activity in conjunction with muscle-strengthening activities on at least 2 days a week to obtain optimal benefits and improve health. However, only 21% of all adults meet this requirement. In addition, more white adults (22.8%) meet the requirement than African-American adults (17.3%).6 Data from the 2010 National Health Interview Survey indicate that 41% of African-American adults report no leisure-time physical activity.7

Fruit and vegetable consumption

Approximately 1.7 million deaths worldwide are attributable to low fruit and vegetable consumption.8 Fruits and vegetables as part of the daily diet reduce the risk of chronic illness and some cancers.7 Specifically, evidence indicates that intake of at least 2.5 cups of fruits and vegetables per day is associated
with a reduced risk of cardiovascular disease, including heart attack and stroke, and may be protective against certain types of cancer.\textsuperscript{9} The United States Department of Agriculture recommends 2-4 servings of fruit and 3-5 servings of vegetables per day based on caloric intake.\textsuperscript{10} Unfortunately, an average adult in the United States consumes fruit about 1.1 times per day and vegetables about 1.6 times per day.\textsuperscript{11} In a recent study of 338 African-American adults, Halbert \textit{et al.} reported that 63\% of the participants did not meet the fruit recommendations.\textsuperscript{12} Likewise, 81\% of the participants did not meet the vegetable recommendations.\textsuperscript{12}

\textbf{Cancer screening}

African-Americans have the highest death rate and shortest survival among any racial ethnic groups in the United States for most cancers.\textsuperscript{7} Overall, about one in two African-American men and one in three African-American women will be diagnosed with cancer.\textsuperscript{7} Furthermore, the lifetime probability of dying from cancer is one in four for African-American men and one in five for African-American women.\textsuperscript{7} Screening can detect cancer at an earlier stage, which can reduce the extent of treatment, improve the chances of cure and thereby improve the quality of life for cancer survivors.\textsuperscript{2,7} However, screening rates for the most frequently diagnosed cancers (breast, prostate, colorectal and lung) are consistently lower for African-Americans compared with that of Whites.\textsuperscript{13}

\textit{Initial search of existing literature}

Doldren and Webb explored the experience, perceptions and attitude of African-American women toward healthy eating and physical activity. The participants reported that they were aware of the importance of healthy eating and physical activity. However, the participants also perceived “healthy” behavior as requiring extensive “pre-planning” and commitment.\textsuperscript{14} Similarly, Griffith \textit{et al.}\textsuperscript{15} conducted focus groups with 105 middle-aged African-American men to explore factors that influence their physical activity. Major findings identified in this study were work, family and community priorities limited time and motivation for physical activity; the effort required to fulfill the role of provider-limited energy to engage in physical activity.\textsuperscript{15} Studies have identified neighborhood factors, such as quality supermarkets and crime, as having a major impact on healthy eating and physical activity in African-Americans.\textsuperscript{16,17} However, Siceloff, Colon and Wilson found that crime was not a significant factor in their study of 434 African-Americans living in low-income communities. They suggested that individuals living in high-crime areas may become accustomed to its presence, and therefore it does not impact their daily lives.\textsuperscript{18}

Griffith \textit{et al.}\textsuperscript{19} conducted focus groups with 14 African-American men and women to explore barriers and facilitators to colorectal cancer screening. The main concepts identified were fear, mistrust, pain, discomfort, doubts access, myths and social norms.\textsuperscript{19} Sheppherd \textit{et al.} surveyed 366 men and women to explore barriers to oral cancer screening. They reported that fear, lack of knowledge and financial barriers were the greatest predictors of intention to participate in screening.\textsuperscript{20} Nolan \textit{et al.}\textsuperscript{21} identified similar concepts in their focus groups’ findings conducted with African-American women, community leaders and providers. They reported competing priorities as an additional barrier to screening.\textsuperscript{21}

Allen \textit{et al.}\textsuperscript{22} explored African-American men’s perceptions of prostate cancer screening. In addition to the aforementioned concepts, they found that relationship with healthcare providers had a major impact on prostate cancer screening.\textsuperscript{22}

The conclusion of the initial search is that understanding the facilitators and barriers to health-promoting behaviors in African-Americans is of importance to healthcare providers. A preliminary search of the JBI Database of Systematic Reviews and Implementation Reports, CINAHL and PubMed revealed that no available systematic reviews of protocols on this topic exist.

\textbf{Inclusion criteria}

\textbf{Types of participants}

The current review will consider all studies that included adult (>18 years) participants who self-identify as African-American or Black born in the United States.

\textbf{Phenomena of interest}

The current review will consider studies that investigate barriers and/or facilitators to health-promoting behaviors from the African-American participants’ perception and experiences. For the purpose of this review, specific health-promoting...
behaviors of interest will include cancer screenings, physical activity and fruit/vegetable consumption.

Context
The current review will include African-American adults living in the community setting. However, studies that exclusively report experiences of African-American adults being cared for in the home or in a residential facility will be excluded.

Types of studies
The current review will consider studies that focus on qualitative data including, but not limited to, designs such as interpretive, descriptive-exploratory, phenomenology, grounded theory, ethnography and action research. In the absence of research studies, other text, such as opinion papers and reports, will be considered.

Search strategy
The search strategy aims to find both published and unpublished studies. A three-step search strategy will be utilized in this review. An initial limited search of MEDLINE and CINAHL will be undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search, using all identified keywords and index terms, will then be undertaken across all included databases. Third, the reference list of all identified reports and articles will be searched for additional studies. No date limits will be placed on database searches. Studies published in English will be considered for inclusion in this review.

The databases to be searched include:
CINAHL
MEDLINE
PsycINFO
Academic Search Premier.
Health Source: Nursing
JSTOR
Project Muse
Science Direct
The search for unpublished studies will include:
Google scholar
PsychEXTRA
ProQuest
Initial keywords to be used will be:
“African Americans” [MH] or “African American” or African-American or Blacks [tw] or Black [tw]

AND
“health promotion” or “risk reduction behavior” or “cancer screen” or “early detection of cancer” or “physical activity” or “leisure activity” or exercise or fruit or vegetable or diet or “food habits”

AND
facilitat or barrier or perception or “attitude to health” [MH] or experience or perspective or views

Assessment of methodological quality
Qualitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer.

Data extraction
Qualitative data will be extracted from papers included in the review using the standardized data extraction tool from JBI-QARI (Appendix II). The data extracted will include specific details about the phenomena of interest, populations, study methods and outcomes of significance to the review question and specific objectives.

Data synthesis
Qualitative research findings will, where possible, be pooled using JBI-QARI. This will involve the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings rated according to their quality, and categorizing these findings on the basis of similarity in meaning. These categories are then subjected to a meta-synthesis to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible, the findings will be presented in narrative form.

Acknowledgements
Leslie Rittenmeyer, PsyD, RN assisted with proofreading and editing of the manuscript.

References
Appendix I: Appraisal instruments

QARI appraisal instrument

**JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research**

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<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
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<td>1. Is there congruity between the stated philosophical perspective and the research methodology?</td>
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<td>5. Is there congruity between the research methodology and the interpretation of results?</td>
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<td>6. Is there a statement locating the researcher culturally or theoretically?</td>
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<td>7. Is the influence of the researcher on the research, and vice-versa, addressed?</td>
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<td>8. Are participants, and their voices, adequately represented?</td>
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<td>9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?</td>
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<td>10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?</td>
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Overall appraisal: □ Include □ Exclude □ Seek further info. □

Comments (Including reason for exclusion)
Appendix II: Data extraction instruments

QARI data extraction instrument

**JBI QARI Data Extraction Form for Interpretive & Critical Research**

- **Reviewer**: ____________________  **Date**: ____________________
- **Author**: ____________________  **Year**: ____________________
- **Journal**: ____________________  **Record Number**: ____________________

**Study Description**

- **Methodology**
- **Method**
- **Phenomena of Interest**
- **Setting**
- **Geographical**
- **Cultural**
- **Participants**
- **Data analysis**
- **Authors Conclusions**
- **Comments**

**Complete**: Yes ☐  No ☐
## Systematic Review Protocol

**T.Y. Eastland and E.C. Hardy**

### Table

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<tr>
<th>Findings</th>
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Extraction of findings complete: Yes [ ] No [ ]