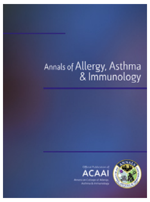
Ann Allergy Asthma Immunol 112 (2014) 35–39

Contents lists available at ScienceDirect



Young, African American adults with asthma: what matters to them?

Aimee L. Speck, MD [*]; Belinda Nelson, PhD [†]; S. Olivia Jefferson, MSW [†]; and Alan P. Baptist, MD, MPH [*,†]

[*] *Division of Allergy and Clinical Immunology, University of Michigan, Ann Arbor, Michigan*
[†] *Department of Health Behavior and Health Education, School of Public Health, University of Michigan, Ann Arbor, Michigan*

ARTICLE INFO

Article history:
Received for publication August 28, 2013.
Received in revised form October 9, 2013.
Accepted for publication October 21, 2013.

ABSTRACT

Background: Asthma is a common chronic condition that shows significant health disparities among minority populations. Little research has focused on the management needs and preferences of young African American adults with asthma, a population undergoing dramatic life changes as they transition from adolescence to adulthood.

Objective: To understand the experiences and perspectives of young African American adults managing their asthma.

Methods: Focus groups were conducted with African American adults ($n = 34$) 18 to 30 years old with a physician diagnosis of asthma. Focus group sessions were audiotaped, transcribed verbatim, and coded using constant comparative analysis.

Results: Six major domains were identified and some of the salient themes included changes in asthma management needs with the onset of adulthood, career limitations owing to asthma, childcare interference with asthma regimen adherence, and difficulties with medication cost owing to lapses in insurance coverage. Participants also reported feeling discouraged when interacting with physicians as it related to their asthma care; yet ageism and racism were not perceived. Despite poor medication regimen compliance, participants were overwhelmingly interested in participating in asthma self-management programs and had strong preferences that such programs be tailored specifically to young adults with special consideration of the cultural experience of young African Americans with asthma.

Conclusion: Young African American adults have specific barriers to optimal asthma care and distinctive ideas for self-management programs. It is important for the asthma care provider to identify and address these population- and age-specific barriers to improve asthma outcomes and decrease health care disparities.

Introduction

Asthma is a common chronic condition characterized by airflow obstruction, bronchial hyper-responsiveness, and inflammation.[1] Studies have consistently demonstrated health care disparities in asthma. For example, African Americans have a much higher prevalence of asthma attacks, with nearly 3 times more emergency department visits, hospitalizations, and deaths from asthma than whites.[2] Recent prevalence rates for asthma in the United States have shown that 7.3% of the population has asthma, with a slightly higher rate of 8.1% in African Americans,[3] yet the severity and control measures are significantly worse.

Health disparities in asthma are due to environmental and underlying genetic factors. Urban areas, which often have a predominance of African American patients, may have factors associated with asthma, such as exposure to air pollution,[4] cockroaches,[5] dust mites,[6] poor diet,[7] poverty,[8] stress,[9] and violence.[10] Nevertheless, studies that have controlled for these factors have found that African Americans have significantly worse asthma outcomes, decreased visits with asthma specialists, and decreased use of an inhaled corticosteroid for persistent asthma compared with whites.[8,11–13] In consequence, understanding and removing barriers to optimal asthma care is important for decreasing asthma disparities in African Americans.

To date, little research has focused on optimal interventions in young African American adults with asthma. Young adulthood marks profound change and importance because many are faced with being responsible for their own health care, finances, education, and employment. In addition, many pediatricians discontinue care for patients at 18 years of age and not all adult medical providers are fully trained to handle the challenges and personalities of young adults emerging from adolescence.[14]

Reprints: Aimee L. Speck, MD, Division of Allergy and Clinical Immunology, University of Michigan School of Medicine, 24 Frank Lloyd Wright Drive, PO Box 442 Lobby H-2100, Ann Arbor, MI 48106; E-mail: aleyton@med.umich.edu.

Disclosure: Dr. Bapist received a research grant from AHRQ. The other authors have nothing to disclose.

Funding: This study was supported by grant 1 R21 HS020977-01A1 from the Agency for Healthcare Research and Quality grant (to A.P.B.).

1081-1206/13/$36.00 - see front matter © 2014 American College of Allergy, Asthma & Immunology. Published by Elsevier Inc. All rights reserved.
http://dx.doi.org/10.1016/j.anai.2013.10.016

To understand the unique experiences of this population, focus groups were chosen to capture a detailed description of concerns, fears, and challenges related to asthma to generate concepts for improved management and research.[15,16] Qualitative research provides useful methods to understand the complexity of patients' attitudes and beliefs regarding their health.[16] Qualitative research also can be used to generate hypotheses for subsequent quantitative research. The authors conducted focus groups with young African American adults with asthma to better understand the barriers to optimal asthma management, identify strategies to improve asthma management, and explore preferences for participating in an asthma self-management program.

Methods

Participants

Focus groups were conducted with 34 African American adults 18 to 30 years old with a physician diagnosis of persistent asthma. All participants were self-identified as African American. Persistent asthma was defined as currently using a controller medication (inhaled corticosteroids, inhaled corticosteroids plus long-acting β agonist, or a leukotriene modifier) on a daily basis, using a rescue medication at least 3 times per week, or having been to the emergency department in the past year because of asthma. Participants were ineligible if they had any other significant cardiopulmonary disease, had a greater than 20–pack-year smoking history (because this level has been associated with the development of chronic obstructive pulmonary disease)[17]; were not fluent in English, or had a significant cognitive impairment that would make participation in a focus group impossible.

Participants were recruited from the University of Michigan asthma registry and 2 community clinics. Most patients who were recruited using the University of Michigan asthma registry had some type of insurance. One of the community clinics is a federally qualified health center, which provides care for individuals without insurance. The other recruitment site is a community outreach clinic, which serves adolescents and young adults exclusively, often without insurance. Demographic information and responses to the Asthma Control Test[18] were collected by a self-administered questionnaire. The University of Michigan institutional review board approved the study, and all participants provided written consent.

Focus Group Design and Data Collection

A research team composed of 2 asthma and allergy physician specialists and 2 behavioral research scientists with experience conducting asthma focus groups developed a series of open-ended questions and prompts to guide discussions. The questions were based on a review of the asthma literature about the intended target population and addressed topics, such as initial asthma diagnosis, interference with quality of life, challenges to optimal asthma management, medication compliance, changes in asthma over time, physician discussions regarding asthma, motivation to participate in an asthma self-management program, and their preferences for asthma education programs. Participants also were invited to share views or any other aspect of asthma management they wished to discuss.

Focus groups were conducted from November to December 2012. As recommended in previous research on the structure of focus groups, each group was designed to consist of 6 to 10 participants.[19,20] Each focus group lasted approximately 1.5 to 2 hours and was led by 2 facilitators. The 2 facilitators were African American and experienced focus group leaders who had previously worked with African American and asthmatic populations. A physician also was present at the beginning of the focus group to answer questions posed by the participants. Once the question-and-answer period ended, the physician left the discussion area to generate unbiased conversation. The groups were conducted in a manner to ensure confidentiality and encourage spontaneous discussion. The moderators encouraged further discussion, obtained information from less vocal members of the focus groups, and clarified and summarized comments as needed. Each session was recorded and transcribed verbatim by an independent professional transcription service. Participants received a monetary incentive after completion of the focus group.

Table 1
Characteristics of participants (n = 34)

Age (y), mean ± SD	24.7 ± 3.3
Sex, n (%)	
Male	11 (32)
Female	23 (68)
Currently in school, n (%)	8 (24)
Currently working, n (%)	20 (59)
Hours worked per week (for those currently working), mean ± SD	40.7 ± 12.6
Level of education, n (%)	
High school or less	20 (59)
Trade school/some college	9 (26)
College degree or higher	5 (15)
Medical problems (in addition to asthma), n (%)	
0	16 (47)
1	10 (29)
2	5 (18)
3	3 (9)
Age at asthma diagnosis (y), mean ± SD	7.6 ± 7.4
Asthma medications, n (%)	
None	2 (6)
SABA only	7 (21)
Daily ICS	13 (38)
Daily ICS + LABA combination	5 (15)
ICS/ICS + LABA and Singulair[a]	7 (21)
Any ED visits in previous year due to asthma, n (%)	
Yes	20 (59)
No	14 (41)
Any hospitalizations in previous year due to asthma, n (%)	
Yes	7 (21)
No	27 (76)
Unknown	1 (3)
Any ICU admissions/intubation in lifetime due to asthma, n (%)	
Yes	11 (32)
No	22 (65)
Unknown	1 (3)
ACT score, mean ± SD	16.3 ± 4.1

Abbreviations: ACT, Asthma Control Test; ED, emergency department; ICS, inhaled corticosteroid; ICU, intensive care unit; LABA, long-acting β_2 agonist; SABA, short-acting β_2 agonist.
[a] Montelukast sodium (Merck, Whitehouse Station, New Jersey).

Analysis

The analysis of the focus group data began with a review of the transcript from the first focus group session. Consistent with recommendations for multiple coding of qualitative research data,[21,22] 3 coders from the study team reviewed the first transcript: 2 physicians from the study team who had not been present for the focus group discussions and 1 of the focus group facilitators. Working independently, the coders read the text of the first transcript and identified categories of responses that emerged for each line of text. Then, coders discussed their individual coding of categories and themes. Differences in coding were resolved with repeated review and discussion of the transcript data. When agreement of consensus was established, a final coding scheme was constructed. This grid of codes was applied to the remaining interview data. Each remaining transcript was reviewed. When new categories or responses were identified, they were added to the grid of codes after consensus was established for the new findings. New categories of responses were added only after all coders had reached agreement.[23] After all transcripts were coded, themes and categories of responses were clustered into major domains. Data are presented as mean ± SD where appropriate.