

Stress and Quality of Life in Caregivers of Inner-City Minority Children With Poorly Controlled Asthma

Melissa H. Bellin, PhD, MSW, LCSW, Joan Kub, PhD, RN, Kevin D. Frick, PhD, Mary Elizabeth Bollinger, DO, Mona Tsoukleris, PharmD, Jennifer Walker, MHS, Cassie Land, MA, & Arlene M. Butz, ScD, RN

Melissa H. Bellin, Assistant Professor and Chair, Health Specialization, School of Social Work, University of Maryland, Baltimore, MD.

Joan Kub, Associate Professor, Schools of Nursing, Medicine, and Public Health, Johns Hopkins University, Baltimore, MD.

Kevin D. Frick, Professor, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD.

Mary Elizabeth Bollinger, Associate Professor, School of Medicine, University of Maryland, Baltimore, MD.

Mona Tsoukleris, Associate Professor, School of Pharmacy, University of Maryland, Baltimore, MD.

Jennifer Walker, Health Educator, School of Medicine, Johns Hopkins University, Baltimore, MD.

Cassie Land, Senior Project Coordinator, School of Medicine, Johns Hopkins University, Baltimore, MD.

Arlene M. Butz, Professor, Schools of Nursing and Medicine, Johns Hopkins University, Baltimore, MD.

This study was funded by the National Institute of Nursing Research, National Institutes of Health, grant No. NR010546.

Conflicts of interest: None to report.

Correspondence: Melissa H. Bellin, PhD, MSW, LCSW, School of Social Work, University of Maryland, 525 W Redwood St, Baltimore, MD 21201; e-mail: mbellin@ssw.umaryland.edu.

0891-5245/\$36.00

Copyright © 2013 by the National Association of Pediatric Nurse Practitioners. Published by Elsevier Inc. All rights reserved.

Published online November 17, 2011.

<http://dx.doi.org/10.1016/j.pedhc.2011.09.009>

ABSTRACT

Introduction: Caregiver quality of life (QOL) is known to influence asthma management behaviors. Risk factors for low caregiver QOL in families of inner-city children with asthma remain unclear. This study evaluated the interrelationships of asthma control, stress, and caregiver QOL.

Method: Data were analyzed from a home-based behavioral intervention for children with persistent asthma after treatment for asthma in the emergency department. Caregivers reported on baseline demographics, asthma control, asthma management stress, life stress, and QOL. Hierarchical regression analysis examined the contributions of sociodemographic factors, asthma control, asthma management stress, and life stress in explaining caregiver QOL.

Results: Children ($N = 300$) were primarily African American (96%) and young (mean age, 5.5 years). Caregivers were predominantly the biological mother (92%), single (70%), and unemployed (54%). Poor QOL was associated with higher caregiver education and number of children in the home, low asthma control, and increased asthma management stress and life stress. The model accounted for 28% of variance in caregiver QOL.

Discussion: Findings underscore the need for multifaceted interventions to provide tools to caregivers of children with asthma to help them cope with asthma management demands and contemporary life stressors. *J Pediatr Health Care.* (2013) 27, 127-134.

KEY WORDS

Asthma, caregiver, stress, quality of life

Asthma is the most common childhood chronic health condition, is a leading cause of functional

disability (Bai, Hillemeier, & Lengerich, 2007), and is one of the major reasons for pediatric emergency department (ED) visits (Boyd et al., 2009). During the past two decades, asthma prevalence, morbidity, and mortality rates have significantly increased (Diette & Rand, 2007; Lukacs, Francis, Baron, & Crane, 2002), with inner-city minority children and their families disproportionately affected (Persky et al., 2007; Williams, Sternthal, & Wright, 2009). Measuring caregiver quality of life (QOL) offers critical insight into the impact of asthma on these vulnerable families (Price, Bratton, & Klinnert, 2002), including the degree to which the health condition interferes with daily life activities and depletes psychosocial and financial resources (Everhart & Fiese, 2009; Patterson & McCubbin, 1983).

A range of clinical and contextual factors increase the risk for low QOL in caregivers of children with asthma. Poor asthma control, for example, is associated with caregiver work absences (Schmier et al., 2007). In a study of children aged 3 to 7 years with mild persistent to severe persistent asthma, poor asthma control had a negative impact on parental QOL (Halterman et al., 2004). Asthma management stress, or the perceived burden associated with daily demands of care (Fiese, Winter, Anbar, Howell, & Poltrock, 2008), also has been identified as a risk factor for restricted QOL. Research on family asthma management routines found perceived asthma burden to be inversely related to caregiver QOL, even after disease severity was taken into account (Fiese, Wamboldt, & Anbar, 2005). Other investigators similarly observed that a negative association between daily inhaled corticosteroid use and caregiver QOL did not change after controlling for the effects of asthma severity, which suggests that daily management of asthma in a child may be perceived as stressful by some caregivers (Halterman et al., 2004). Furthermore, even with few asthma symptoms, the association between perceived asthma management stress and decreased caregiver QOL remains (Annett, Bender, DuHamel, & Lapidus, 2003).

Caregivers of inner-city minority children with asthma may be especially vulnerable to poor QOL because of perceived life stressors within families and communities (Clougherty, Kubzansky, Spengler, & Levy, 2009). Life stress is conceptualized as the problems and difficulties experienced in daily life that result in physiological, psychological, and behavioral responses and affect psychosocial functioning (Israel, Farquhar, Schulz, James, & Parker, 2002; Shalowitz, et al., 2006). Several stressors experienced by inner-city families are associated with the public health concept of "neighborhood disadvantage," including poverty, high crime, lack of access to resources, air pollution, exposure to allergens, substandard housing, and unemployment or underemployment (Attar, Guerra, & Tolan, 1994). Exposure to neighborhood violence, in particular, is linked to poor asthma control in high-risk inner-city youths (Swahn &

Bossarte, 2006; Wright et al., 2004). Further, a cumulative risk model inclusive of contextual risks (e.g., neighborhood stresses), cultural risks (e.g., discrimination), and asthma-specific risks (e.g., severity) accounted for more morbidity than poverty or severity alone in a sample of urban children with asthma (Koinis-Mitchell et al., 2007).

One model predicting QOL in families of young children with mild to moderate asthma indicates that caregivers who experience several simultaneous life stressors report an especially profound decline in QOL (Everhart, Fiese, & Smyth, 2008). A proposed mechanism for contextual risk factors experienced by inner-city families associated with increased asthma morbidity is that chronic life stress (e.g., poverty and housing instability; Sandberg et al., 2000) and acute stressors (e.g., community violence; Sandberg, Järvenpää, Penttinen, Paton, & McCann, 2004) may impede a caregiver's capacity to appropriately manage his or her child's asthma, including adherence to the child's complex medication regimens and accessing preventive care (Wright et al., 2004). Because life stressors increase the risk for asthma morbidity and contribute to asthma health disparities, a greater understanding of the interrelationships of life stress and asthma outcomes is a research priority (Wright & Subramanian, 2007).

In summary, improving caregiver QOL by intervening in associated risk factors has been identified as a primary aim of interventions, given its potential impact on the child's disease management (Everhart et al., 2008), caregiver decisions about health care utilization (Halterman et al., 2004), and associations with child QOL (Marsac, Funk, & Nelson, 2006; Williams et al., 2000). However, few studies have examined the influence of both contextual and asthma-related risks on caregiver QOL in low-income families of young inner-city children with asthma. In addition, the interaction of risks has not been examined in relationship to QOL except in one study that primarily consisted of White caregivers (Everhart et al., 2008). This descriptive study was conducted to address this gap in family science by evaluating the interrelationships of asthma control, asthma management stress, life stress, and QOL in a sample of caregivers of inner-city minority children with poorly controlled asthma. The primary hypothesis tested in this study was that caregiver QOL would be negatively associated with asthma management stress and life stress, after accounting for the effects of asthma control, number of children in the home, and the caregiver's level of education. Exploratory analyses also were conducted to examine the interaction of asthma management stress and daily life stress on caregiver QOL.

METHODS

Following study approval by the associated Institutional Review Boards, children with asthma were identified and recruited from a daily review of medical

Download English Version:

<https://daneshyari.com/en/article/5870483>

Download Persian Version:

<https://daneshyari.com/article/5870483>

[Daneshyari.com](https://daneshyari.com)