Abstract

**Purpose:** To explore, from an emic perspective, the unique socio ecological context in which rural grandparent headed households (GHH) exist, and therefore provide a foundation for the development of culturally-appropriate interventions that might impact their health.

**Methods:** This qualitative descriptive study was based on the conduct of in-depth, semi-structured interviews with fifteen grandparents, residing in rural Appalachian Kentucky, who were the primary caretakers for their grandchildren. The interviews were conducted using an interview...
guide that was based on the premises of the Social Ecological Model (SEM). A basic assumption of this model is that intrapersonal, social-cultural, organizational, and policy factors influence individual health and health behaviors, and that these influences are interrelated and reciprocal. Data was analyzed by the research team using line by line coding of the audio recorded transcriptions of the interviews.

Findings: GHH experience both barriers and facilitators to maintaining the health of GHH. Many grandparents viewed the experience of belonging to a GHH as a positive one, believing that having their grandchildren in their home improved their health. They relied on formal and informal networks such as extended family and churches to help with caretaking responsibilities. Grandparents experienced notable barriers to health related to having the primary responsibility of their grandchildren, including lack of resources and family tension related to incarceration and/or opioid drug use by biological parents.

Conclusions: GHH, one of the fastest growing family constellations in rural Appalachia and the US, may be particularly vulnerable to health threats elevating their risk for many chronic diseases. Effective health related interventions to address this risk should be based on the socio-ecological context in which these families exist.

Keywords: Rural, Grandparent headed households, Qualitative, Socio-ecological model

Rural Grandparent Headed Households: A Qualitative Description

Grandparent headed households (GHH) are one of the fastest growing family constellations in the country. The most recent data show that in 2012, an estimated 7 million grandparents live with at least one grandchild, and 2.7 million of these grandparents have the responsibility of raising
their grandchild (United States Census Bureau, 2014). These numbers reflect an increase in GHH over the course of the past 25 years (United States Census Bureau, 2014). Further, there is likely an underestimation of the number of GHH, given the informal kinship arrangements that exist for many of these households (B. Hayslip, Jr., Fruhauf, & Dolbin-MacNab, 2017).

These families, often referred to as skipped-generation families, develop as a result of various circumstances, including: parental incarceration, death, mental illness, and/or substance abuse (Bachman & Chase-Lansdale, 2005; Winokur, Holtan, & Batchelder, 2014). Regardless of the reason for the family composition, there are both challenges and benefits inherent in this family constellation. These challenges and benefits include mental, physical, and emotional factors for both grandparents and grandchildren (B. Hayslip, Jr. et al., 2017). For example, children residing in GHH, who might have otherwise been placed in state care, are often able to maintain connections with birth parents and cultural and ethnic traditions (Koh & Testa, 2008). Additionally, grandparents who are raising their grandchildren report greater life satisfaction and happiness by keeping their family united (Bullock, 2005; Goodman, 2001).

Challenges for those in GHH include a greater likelihood of poverty, limited resources, stress due to fear of removal of children from the home, a lack of food security, and social isolation. These challenges are in part due to the fact that two thirds of GHH have a household income less than 200% of the federal poverty line, with nearly half of those households below the 100% federal poverty (Dunifon, Ziol-Guest, & Kopko, 2014). Despite this level of poverty, only 12% of these household receive public assistance of any kind and one third of the GHH receive food stamps (Dunifon et al., 2014). There is also a growing body of evidence that suggests that grandparents raising their grandchildren suffer disproportionately from poor health compared to their peers who are not raising grandchildren. For example, in one study conducted across Boston, Chicago, and
San Antonio, custodial grandmothers reported worse perceived physical health compared to custodial mothers (Bachman & Chase-Lansdale, 2005). This may be due to the fact that grandparents, who are raising grandchild, are less likely to engage in preventative health behaviors compared to grandparents who are not raising grandchildren, even when considering financial and emotional hardships within the household (Baker & Silverstein, 2008).

Much of what we know to date about GHH is based on findings from studies with urban African American families (Haglund, 2000; Kelley, Whitley, & Campos, 2013; Minkler & Fuller-Thomson, 2005). However, the largest number of GHH in the country live in rural areas. For example, the state of KY, a largely rural state, has one of the highest rate of children being raised by non-parent family members in the United States (Generations United, 2016). In KY, over 58,000 grandparents are the householders responsible for their grandchildren who live with them, and of these households, nearly a third do not have either parent present (United States Census Bureau, 2016). Rates of GHH are even higher in the Appalachian counties of KY, where an estimated 23,000 grandparents are responsible for their grandchildren, and over half of these households have no parent present (United States Census Bureau, 2016).

Despite the large number of GHH represented in rural Appalachia, there is a dearth of research elucidating any unique health issues faced by these families. While they are likely to face issues similar to other rural residents, including access to quality medical care, sparse community and medical services, and persistent poverty and unemployment, these may be further compounded by their family constellation.

The purpose of this paper is to explore, from an emic perspective, the unique socio-ecological context in which rural GHH exist, and therefore provide a foundation for the development of culturally-appropriate interventions that might impact their health.
Theoretical Framework

Because the health of GHH members is influenced by multiple factors in the physical and social environment, in addition to personal attributes and behaviors, we draw on the social ecological model (SEM) for conceptual guidance (Stokols, 1992). The premise of SEM is that human behavior is best understood as interplay between the person and their environment. A basic assumption of this model is that intrapersonal, social-cultural, organizational, and policy factors influence individual health and health behaviors, and that these influences are interrelated and reciprocal. Prior to the inception of the SEM, health promotion efforts focused solely on the individual and individual health behaviors. Thus, the SEM was created by a social ecologist to bridge the gap between health promotion efforts and existing knowledge of how an individual’s environment impacts their health (Stokols, 1992).

We selected to use the SEM as a guiding framework, as this study aims to holistically examine health behaviors and health risks present in grandparents who are raising their grandchildren. Using the SEM as a framework for this study requires exploration of the interaction between the environmental and community resources available in the region and the culture, health habits, and life-styles of those residing in the area. Employing this broad and dynamic model allows us to identify, in a grounded and authentic manner, leverage points for intervention without the traditional focus on individual level factors alone.

Methods

For this qualitative, descriptive study, we conducted face to face, in-depth, semi-structured interviews with fifteen grandparents, residing in rural Appalachian KY, who were the primary caretakers for their grandchildren. The participants resided primarily in Whitesburg, Kentucky.
Whitesburg is located in Letcher County KY, a county that rates a 9 on the Rural-Urban Continuum code, indicating that the county is completely rural. The range on the RUCC is 1 to 10 with 10 being the most rural (United States Department of Agriculture, 2013). The interviews were conducted using an interview guide that was based on the premises of the SEM. The interviews began with open-ended prompts (e.g., Describe how you came to be the primary care taker for your grandchild. What community resources do you use to help your grand family? Who makes the decisions about what your family eats?) The interviews lasted approximately one hour, they were voice recorded and professionally transcribed, and then each transcript was checked against the recording for accuracy. A codebook was developed inductively from the interviews using line by line coding with the SEM framework as a guide. Trained research assistants separately coded all the transcripts, and then the full research team met to discuss discrepancies until consensus was reached.

Prior to conducting the study, Institutional Review Board (IRB) approval was obtained from the University of Kentucky IRB. The protocol approval number is 14-0311-PIH.

**Results**

The sample consisted of 15 grandparents all residing in rural Appalachian KY. All participants identified as White, non-Hispanic females. In this sample, the mean age was 58.9 years (SD = 6.09). The majority of participants were married (n = 9, 60%). The average years of education for this sample was 11.1 years (SD = 3.1). Employment status varied among participants, 26.7% (n = 4) were homemakers, 20% (n = 3) were employed full time or part time outside the house, 20% (n = 3) were on sick leave or disability, 13.3% (n = 2) were retired due to illness, 6.7% (n = 1) were retired not due to illness, 6.7 % (n = 1) were unemployed or laid off, and 6.7% (n = 1) were unemployed by choice. All of the participants were insured. While the
majority were insured through government insurance (n=13, 86.7%), 13.3% (n=2) had private insurance.

The findings from the study are presented in the context of the SEM and describe the socioecological factors that influence the health of rural Appalachian GHH family members under the five domains: intrapersonal, interpersonal, community, organizational/institutional and policy.

**Intrapersonal**

Intrapersonal factors are individual characteristics including knowledge, attitudes and beliefs that influence health and health behavior. Intrapersonal challenges to grandparent health included role changes and knowledge. Adapting the role of primary care giver versus grandparent challenged many of the grandparents to concentrate on their own health and placed them in the role of disciplinarian and care taker. While they appreciated this new role, it seemed to challenge their ability to interact with the grandchildren in the expected or traditional ways, adding mental, emotional and physical stress to the relationship and perhaps contributing to altered decisions regarding their own personal health. “You miss out on the joy of being a grandparent because you have to discipline them to. You can’t just spoil them for a while and they’ll go home. You don’t get to do that”. “There is a real difference in just being plain old grandma.” Participants were conflicted between the traditional roles of a grandparent versus the parental role they assumed. This took an emotional toll on some grandparents, “...sometimes I got to be the boss- the bad guy.” Societal dangers also added to this role change, “…you want to be easier on your grandchildren because they are your grandchildren. But in this day and age, you really have to stick to your guns in all matters.” Some grandparents found themselves in a more demanding role, “I have to be on my feet all day, everyday...my feet swell real bad and everything. But you have to keep on going until the good lord chooses otherwise.”
An additional personal challenge to the health of the grandparents was their own knowledge level regarding healthy lifestyles and available community resources for families structured like their own. Others admitted to limited knowledge about healthy lifestyle, “I’m just an old fogey...about eating and food and cooking, and frying and baking or whatever.”

While grandparents faced multiple personal challenges to their health, they also acknowledged the personal health benefits of being in a GHH. Many grandparents expressed that their grandchildren make them feel healthier, happier, and stronger because they are active in keeping up with their grandchildren. One grandparent stated “…it just makes me happy, healthy...It helps my sugar stay calmer, all that. I am doing stuff...if I didn’t have them I don’t think I could make it.” Another added, “I have more strength now than before I got them, they saved my life.”

Avoiding illness and staying healthy was a motivator for many grandparents. Grandparents related, “Well, you have to be in good health for them” and “I want to be healthy for my grandkids so I can help raise them.” As stated by another grandparent, “What would two old people do? We’re waiting for our golden years but all it is going to the doctor’s. But with them, we’ve got something always to do”. One grandmother summed, “I don’t want to get sick cause I take care of him.” Many grandparents sought and acquired new knowledge in their caregiving role to understand and help the children. One grandmother stated “I’m learning. I try to figure out what they are doing on the phone.” Another stated, “...keep my mind always going. So it’s benefitted me in the long run.”

Worry over the health of their grandchildren motivated grandparents to stay healthy and make better choices. One grandmother cited, “Now we both watch what we eat, like I told ...the dietician at Mountain Comp, she was telling me how to... (watch) the portion size...his papaw, he’s a real bad diabetic. So you just have to watch...Try to do the best I can...” Another
grandmother stated. “I am very picky. I try to watch, I don’t give them a lot of sugar or junk food. I make sure they eat healthy.”

Many grandparents felt that traditions were helpful in maintaining a healthy lifestyle. Outdoor play, gardening, and preserving food were traditions cited as facilitators to healthy behavior. One grandmother stated, “Right now we have a lot of fresh vegetables from the garden and I also can a lot.” Daily chores helped many grandparents stay active and were a way to help them teach grandchildren healthy behaviors, such as gardening and cooking.

Grandparents also found that their traditional foods often conflicted with their grandchildren’s preferences. Some grandparents adapted meals to include foods such as pizza or macaroni and cheese to appease picky eaters. Others cooked separate meals for themselves and the grandchildren, one grandparent makes “three or four different meals for supper cause they don’t all like the same stuff. I have to cook them stuff that they like.” Convenience and fast food has encroached on healthier traditional foods such as garden-raised vegetables, with some of this related to fatigue or not having time to cook. One grandparent commented, “We eat whatever’s handy to fix and easier to fix rather than take the time...eating fast food when we have ball practice.”

Many expressed frustrations about not being able to provide healthier foods for their families. One grandmother stated, “You can’t get something that’s going to be healthy and then skip the month. You have to look at it from the first [of the month], and see what’s going to go that whole month. And they’re not going to go to bed hungry.”

**Interpersonal**

Interpersonal factors are social relationships that impact health and health behavior such as extended family support, neighbors, and friends. Support from family members was cited as a
healthy facilitator, with spousal support being the most commonly cited. One working grandmother stated, “My husband is really good, he does a lot. He’s not much of a cook. He does everything else.” Support from extended family members was important for grandparents without spouses or whose spouses were ill. “…My family, my children, my mother. My mother is my root.” and “…my daughter…she’s the one who takes her dad to his radiation,” represented this support. Even the grandchildren living with the grandparent provided support, “… (grandson), he helps his papaw do a lot of things cause he can’t no more. So he helps a lot.” This support was critical to maintaining a healthy lifestyle while raising grandchildren.

Faith and church were a critical part of social support. One grandmother stated, “I am going to say God. The grace of God,” when asked who provided her the most support.

Given the older age of grandparents, many of them are subject to serious and chronic illnesses while raising grandchildren. This is further impacted by the family constellation and also contributes to added stress in the household. One grandparent commented, “The kids and I thought everything was going to be ok…then cancer walks in the door. My husband is eaten up with cancer.” It can also impact the finances of the household, “His papaw’s got prostate cancer now, has to go five days a week to have radiation. He’s a diabetic, he’s got a bad heart- he has a pacemaker and a defibrillator…it’s going to be hard.”

An often cited interpersonal challenge was parental interference. As one grandmother related, “…the mother instinct in me comes out maybe because she’s always trying to interfere with my family.” Parents would, at times, undermine the grandparents’ authority, “[My daddy said I don’t have to mind you, you’re not our boss…] it’s not good, it’s not healthy.”

Strained family relationships also caused stress. Causes for this strain included: perceived mistreatment of the grandchildren by the biological parents, parental substance abuse,
incarceration of the grandchildren’s parents, remarriage of the parents, and custody conflicts. This
grandparent felt anger and resentment, “He gets on my nerves. He doesn’t do what he’s supposed
to do so I just try to leave it. I just try not to go around him much—because he doesn’t do right by
them (grandkids). And when I think about it, it makes me mad.” As put by another grandparent,
“I have watched these kids cry. And that hurts”.

Parental substance abuse was a significant challenge to nearly half of the grandparents
interviewed. Many grandparents made multiple attempts to help their children, “She wouldn’t
listen. I told her, you’re going to die if you don’t get off of this junk...me and my husband saved
up some money. We took $1200 and took her to ... (rehab). She walks out—right back to the same
thing.” Emotionally, many of these grandparents suffered. As one grandparent relayed, “He’s
put us through everything but we still love him because he’s our son but I wish he would straighten
out. Those old drugs took over.”

Most grandparents in the study cited adequate support from family. However, some lacked
support either because their spouse was ill or had passed away, their family lived out of state, or
their families were not helpful. These grandparents seemed to struggle and were less likely to seek
outside help, “I can raise her. The way I am, we do good...Lord will, we’ll make it.”

Community

Community factors are geographical and political structures and also include social
networks. Grandparents relied on churches to provide them with options they would not have
otherwise. Churches provided a sense of community where “everyone pitches in.” Participants
stated that churches provided assistance with child care, supplemental food, Christmas presents,
and community outings for the children.

Participants were more likely to seek opportunities for exercise and cultivate healthy habits
when they perceived their communities to be safe for them and their grandchildren. Local parks
that were in close proximity to their homes facilitated physical activity. Motor traffic and perceived illicit drug use made outdoor activities unsafe. One grandparent explained, “between the motorcycles and the four-wheelers and the people who are doing drugs in the neighborhood, and we know where they are, I have to be the bad mamaw and not let them go wherever they want to go.” The cost of recreational facilities was also a hindrance. “When you’re on a fixed income, sometimes that three or four dollars is hard to come up with.” Another agreed, “They want to charge you just to get through the door. They have everything you want to do there, but it’s expensive.” It was suggested that the community needs “a safe place in the community that’s not a money racket for big shots...a place in the community that’s not expensive.”

Although some grandparents relied on food pantries to supplement their diets, many viewed these offerings as inadequate and unhealthy. “It’s not a lot. You get some canned stuff. Sometimes you get one or two things of bread. Maybe one freezer meat.” Another added, “Last time I went, we got two bags of potatoes, a frozen pizza, and I think they gave us a box of those White Castles. I got a little roll of hamburger meat.” Grandparents often felt overlooked by community services, and even when offered, many grandparents did not know about them. As stated by one grandmother, “I didn’t know stuff like this existed, like people would help grandparents.”

Organizational/Institutional

Institutional factors that influence health include those that impact the health and the health challenges of families such as schools, workplaces, and healthcare providers. The grandchildren’s schools were a facilitator to a healthy lifestyle. Schools provided programs and classes to encourage health-centered behaviors. One grandparent stated that “even school, even their daycare- they are going to start a physical program for the kids.” Family resource centers within
schools also provided food, clothing, and school supplies, decreasing financial strain for some grandparents.

Social services helped grandparents obtain legal custody of their grandchildren and gain access to financial assistance from governmental agencies. This assistance lessened some worry and stress that many grandparents felt.

Programs provided by local extension offices provided services to support health in participants and their families. “They’ve got a lady up there- She’ll measure it all and show you what’s in this—you wouldn’t believe the kind of stuff in our food!” Grandparents frequently sought opportunities through the extension office because of the low financial obligation, “That county extension teaches everyone! If you want to go, it’s free. You can walk in there any time.” Other community services were also helpful, as one grandmother said, “To me, that’s phenomenal. When you can go and get a free test and tell you how bad it is, even down to my sugar. That is great!”

Grandparent groups provided social support. One grandparent stated, “when you see other grandparents and you’re doing the same thing, you can communicate.”

Policy

Grandparents repeatedly expressed frustration related to lack of public assistance for skipped-generation households, specifically, child support enforcement, assistance programs to defray costs of transportation or community centers, elimination of Kinship care, and food assistance programs. Grandparents stated that policies that provide help, such as increased food and financial assistance would eliminate many of their challenges.

Thirteen of the fifteen interviewed grandparents received assistance from governmental programs such as, supplemental nutrition assistance program (SNAP), social security, disability, or Kinship care. Fixed incomes were a reality for most grandparents and additional financial
assistance was helpful, as one grandmother stated, “They receive kinship care...that helps us buy food.” Vouchers for the local farmer’s market helped provide healthier foods.

In this sample, 86.7% of grandparents had access to free or low-cost healthcare through government insurance, facilitating their health. One grandparent stated, “…we have insurance and that helps a whole lot. When you can go to the doctors for free, when you want to.” Most grandchildren had Medicaid; therefore, grandparents did not have to sacrifice their health to pay for the grandchild’s healthcare. Emotional and behavioral health was often facilitated by services such as Mountain Comprehensive Care.

The creation of the Affordable Care Act (ACA) allowed some participants to obtain health insurance. One grandparent stated, “We now all have that WellCare... We didn’t have insurance until then.” she continued, “You just don’t go if you don’t have insurance - you put it off.”

Challenges to healthy behavior for grandparents came from lack of assistance from government, court systems, and employers. Financial support from the government was viewed as insufficient. Many had to rely on community support such as food banks, churches, and family resource centers within the public schools. Cuts in state programs, such as Kinship Care and the SNAP program, have made making ends meet more difficult. As one grandparents stated, “I wish they would give the [food] stamps back the way they did. They took a big cut out of it. We’re raising our grandkids–and that helped raise our grandkids. ... They don’t look at Kentucky–they talk about poverty everywhere else.... they took the kinship and stopped that. ... That’s going to stop grandparents–how are they going to take care of them? We have nothing here.”

Younger grandparents who did not qualify for social security and could not work had to rely on welfare to make ends meet. This assistance often covered basic necessities and grandparents
were not able to afford needed healthcare items not covered by their health insurance. As one grandparent stated, “I can’t afford glasses- I need them but I can’t afford them.”

Work often conflicted with grandparents’ ability to raise their grandchildren. “It just became a real hectic struggle. I wasn’t bringing enough money home to drive back and forth.” Employers were not sympathetic to the needs of grandparents. “I had to take different shifts and something always came up with them (grandchildren)... And I couldn’t get their mommy or daddy to do anything. So I would have to call in, and of course my employer didn’t like that.” Jobs that offered hours conducive to raising younger grandchildren was another challenge cited.

Grandparents expressed frustration over lack of child support enforcement. While willingly taking on the role of primary caretaker of her grandchildren, one grandparent wished she had “a bit more support in forcing their dad to pay his child support.” Another supported this, “I wish the parents would take care of the children. But it ain’t gonna work out that way.”

Grandparents reported poor financial assistance as a barrier to healthy behaviors. Existing programs often assist families based on income; however, grandparents explained that regardless of income-based payment, transportation and recreation center membership remains unaffordable for their families. One grandparent stated, “That [transportation] is going to cost you an arm and a leg!” Several felt the lack of assistance is due to a lack of recognition that grandparents are frequently raising grandchildren. One grandparent stated, “I think that grandparents are kind of overlooked in a way because people don’t realize that grandparents are the ones raising a lot of children. They assume.”

**Discussion**

This paper provides a socio-ecological examination of the unique facilitators and barriers to the health of family members of rural Appalachian GHHs. Understanding this context is critical.
to the design of interventions to improve the health and decrease health risks of this fast growing family constellation. Research to date has focused primarily on urban African American families, who arguably have access to a different set of resources and view health and wellness from a different cultural lens. This paper provides insight into the experiences of being a member of a rural Appalachian GHH and the impact of that experience of the health of the family members.

The SEM provides a framework that elucidates the unique social contextual factors that contribute to the health of these families, which are important considerations in all health promotion efforts. In each area of the SEM (intra and interpersonal, community, institutional, and policy) there are factors influencing the health of these families that should be considered in the design of culturally appropriate interventions.

Importantly, many grandparents in this study view the experience of belonging to a GHH as a positive one, they believe that having their grandchildren in their home improved their health. “Running after” grandchildren and increased household chores pushed grandparents to be more active which may be helpful in reducing chronic illnesses. Many grandparents expressed being “happier” and “having more energy” since assuming care for their grandchildren. The majority of the grandparents who expressed those views also had a strong social support system made up of family, friends, faith, and community organizations.

The intra and interpersonal factors influencing the health of these families may be mediating factors that can be drawn on to design innovative programing that relies on the strengths of the family relationships and the social support that is a pillar of the rural community. Family interventions that involve extended family members and/or lay health workers who are aware of both formal and informal social networks could be designed to take advantage of the strong social and family ties in the rural community in which these grandparents live. An example of this would
be kinship navigator systems (TriWest Group, 2005). These programs demonstrate the need to address relevant issues to informal caregivers who may deal with situations that are outside of the system and utilize knowledgeable local lay workers and program providers to do so (Fruhauf, Pevney, & Bundy-Fazioli, 2015).

In addition to the positive inter and intra personal and community factors rural grandparents experienced there were a number of notable barriers to healthy living that supported the development of interventions to reduce health risks for these vulnerable families. Grandparents expressed frustration as many community services overlooked grandparents as primary caretakers for their grandchildren (Fruhauf et al., 2015). Grandparents were often too young for older adult services, such as social security or retirement benefits, or were not considered primary caretakers of grandchildren; thus, denied community services. It has been reported that grandparents raising grandchildren typically have the least amount of access to assistance, but often have the greatest need (Strom & Strom, 2011). Families in the rural Appalachian area expressed particular concern related to the increasing number of families impacted by incarceration and other sequela resulting from the opioid epidemic that is impacting their lives. While all states have demonstrated an increase in nonmedical prescription opioid morbidity and mortality during the last decade, death and injury resulting from non-medical prescription opioid misuse is concentrated in rural states such as KY and WV (Keyes, Cerda, Brady, Havens, & Galea, 2014; Schoenberg, Hatcher, & Dignan, 2008; Schoenberg, Howell, Swanson, Grosh, & Bardach, 2013). This pressing public health problem is not only a contributor to the growing number of rural GHH but also provides a complex threat to their well-being. Grandparents who head these households are often not only raising children who may be suffering from drug related disabilities but they are simultaneously dealing with the stress of a drug addicted child who may demonstrate hostility and place the well-
being of the family in danger (Hughes, Waite, LaPierre, & Luo, 2007; Kicklighter et al., 2007; Letiecq, Bailey, & Porterfield, 2008). There is a critical need to provide support to these families in a variety of ways. Interventions that include connections to local social services and help families identify legal, financial, and social resources are necessary (Fruhauf et al., 2015).

The rich description of the socio-contextual factors impacting the health of GHH provides a framework for the development of culturally relevant interventions to reduce the risk of these families for chronic diseases. For example, residents of rural Appalachia are at increased risk for diabetes mellitus (DM) by virtue of experiencing higher rates of obesity, limited food choices, limited access to exercise and other factors. These risk factors for diabetes are shared among family members due to common patterns of race/ethnicity, physical activity, nutrition, and obesity (Rodbard et al., 2012). Addressing chronic disease risk is important in GHH, as the health of the grandparent can directly impact a number of factors in GHH, including: personal resilience, well-being, grandchild difficulties, stress, and life disruption (B. Hayslip, Blumenhal, & Garner, 2014). Further, understanding and intervening to modify the risk of the family may contribute to decrease chronic disease disparities for all generations.

**Conclusion**

Residents of rural Appalachia suffer rates of chronic diseases that are among the highest and most rapidly increasing in the country. GHH, one of the fastest growing family constellations in rural Appalachia and the US, may be particularly vulnerable to health threats elevating their risk for many of these disease. This paper provides a holistic look at the socio-ecological context of these families and forms the foundation for interventions that are culturally and contextually appropriate and may significantly reduce the risk of chronic diseases for these families.
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