

KANSAS RURAL ADOLESCENT HEALTH ISSUES AND NEEDS: FOCUS GROUPS WITH
65 ADOLESCENTS ACROSS FOUR COUNTIES

by

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Abstract

This qualitative study explored 65 rural adolescents' perceptions of health issues and needs. Focus groups were conducted with adolescents in six rural communities in Kansas. Analysis of transcripts suggested that the adolescents' face numerous health issues that strongly influence their behaviors and expressed need for assistance. Adolescent health issues stemmed across biological, psychological, and social factors. Major themes evolved around challenges pertaining to healthy choices in food and nutrition, physical activity, stress management, sexual health, perceptions of invincibility, and poor role-modeling. To improve well-being adolescents need privacy, effective conversations, accessible health services, reliable education, and prioritization of healthy lifestyles. Implications for clinical and research are discussed.

Keywords: adolescents, qualitative research, rural communities, biopsychosocial model

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Chapter 1 - Introduction

In the U.S., nearly 15% of the population (46.2 million) live in non-metro/rural areas (USDA-ERS, 2014). Although there is an overall steady decline of residents in non-metro areas over the years, the rural population in Kansas remain above the national level. In Kansas, 33% of the population (949,608 of 2,904,021 people) live in rural areas (USDA-ERS, 2014). Compared to urban adolescents, rural adolescents are at greater risk for poor health outcomes related to less preventive care, higher rates of chronic diseases (Bailey, 2010), higher prevalence of health risks, and lack of accessible community resources (Levine & Coupey, 2003).

Studies conducted by the Institute for Applied Research in Youth Development revealed that adolescents who thrive have access to caring adults that foster healthy development and are offered meaningful opportunities to belong and build their competencies and abilities (Lerner, 2008). Adolescents are assets to their communities. This positive view of adolescence is supported by more than 20 years of research, which has been adopted by several federal agencies, including the Department of Health and Human Services. The positive youth development principles recognize adolescents as assets, employ their assets, promote protective factors in young people that would enable them to thrive and flourish in their teen years, and prepare them for adulthood (FindYouthInfo.org). Such efforts complement interventions that address adolescent risky behaviors and attitudes. These efforts involve adolescents as active agents and leaders, and involves the community at every level.

Despite the recognition of adolescents as assets, adolescents' voice is scarcely represented in the literature. In order to develop health programs that meet the critical needs of adolescents today, it is imperative that their voices are heard and perspectives of their health conditions and needs are incorporated in health policies. It is especially important to understand

the needs of rural adolescents that have limited access to resources and health services. The lack of rural adolescent health data may impair the ability of policy makers and program developers to justify costs of preventive services for vulnerable adolescents (Curtis, Waters, & Brindis, 2011).

A critical need exists for data on rural adolescent health (Chimonides & Frank, 1998). In order to better serve the needs of rural adolescents, it is important to understand how the rural sociocultural context can challenge adolescent health (Curtis, 2011). To help address the need for data, this study applies the positive youth development principles to gather information on adolescent health that can then be used to improve well-being. Health needs are conceptualized from a biopsychosocial (BPS) model (Engel, 1977) whereby health is understood as an interaction of biological, psychological, and social factors rather than in purely biological terms (Santrock, 2007). This study asks two main questions:

RQ1: What do rural adolescents perceive to be their health needs?

RQ2: What do rural adolescents need to improve their health and well-being?

Chapter 2 - Literature Review

The Biopsychosocial (BPS) Model

Integration of professional services to provide better holistic care and address patient needs at all levels has been a growing trend in healthcare across the U.S. (Gatchel & Oordt, 2003). The BPS model suggests that treatment of disease requires that the health care team address biological, psychological and social influences on overall health and functioning (Halligan & Aylward, 2006). With this, the biological component of the BPS model seeks to understand how the cause of the illness stems from the functioning of the individual's body. The psychological component looks for potential psychological causes for a health problem including but not limited to lack of self-control, emotional turmoil, and negative thinking. The social aspect of the model investigates how different social factors such as socioeconomic status, culture, poverty, technology, and religion can influence health and overall functioning of an individual (Santrock, 2007).

The BPS model is supported by a growing body of empirical literature that suggests that patient perceptions of health and threat of disease, as well as barriers in a patient's social or cultural environment influence the likelihood that a person will engage in health-promoting or treatment behaviors. These behaviors influence and are influenced by biological, psychological and social factors include taking medication, pursuing a proper diet or nutritional health, and engaging in physical activity (DiMatteo, Haskard, & Williams, 2007). While the BPS model does not provide a straightforward, testable model to explain the interactions of each of the three components (biological, psychological, or social), it provides a general framework that can guide theoretical and empirical exploration (Armitage & Conner, 2000).

Rural Adolescent Health

Adolescence is an important developmental stage filled with health opportunities as well as health risks (Johannes, Miller, & Washburn-Busk, 2015). It is during this stage health behaviors are established that affect adult health, productivity, and longevity. Given the problems rural residents face, – including poverty, lack of employment opportunities, lack of transportation, lack of education, substance abuse, lack of health and mental health providers, and lack of insurance that complicate day-to-day living and receiving needed physical and mental health care – rural adolescents are particularly at risk (Gale & Lambert, 2006). Research on rural adolescent health, who constitutes adolescents and how rural adolescents are defined are discussed.

Who Are Adolescents

Technically, adolescence begins at puberty around age 10 or 11. It is unclear when or if adolescence ends at a particular age. There is general consensus that adolescence can be divided into three stages associated with human growth and change: a) early adolescence (beginning at age 10 or 11), b) middle adolescence (beginning at 14 or 15 years), and c) late adolescence and young adulthood (ages 19 and over; Steinberg, 2001). Research however, has revealed that the brain develops into young adulthood (approximately age 25) indicating higher order brain functions, such as decision-making, continue to develop well after the teen years. The Centers for Disease Control and Prevention classifies 20 to 24 year olds as adolescents because their health and service needs are similar, and sometimes even greater, than younger aged adolescents. The Kansas Department of Health and Human Services' Maternal and Child Health Bureau, which is the federal agency that manages Title V, uses the age range of 12 to 22 for adolescence and young adulthood. In this study, adolescents are classified as those aged 12 to 22.

Rural Adolescents

For the purposes of this study, definitions of rural locations in Kansas utilizes the Kansas peer county definitions from the Kansas Department of Health and Environment. Five county peer groups within the state are delineated by persons per square mile with *Frontier* (less than 6 persons per square mile), *Rural* (6 to 19.9 persons per square mile), *Densely-Settled Rural* (20 to 39.9 persons per square mile), *Semi-Urban* (40.0 to 149.9 persons per square mile) and *Urban* (150 or more persons per square mile). (kdheks.gov).

Substance Use

Lambert, Gale, and Hartley (2008) examined substance abuse prevalence across four geographical areas and found rural adolescents aged 12 to 17 years have higher rates of use of alcohol, cocaine, methamphetamine, and inhalants and are more likely than urban adolescents to engage in dangerous behavior such as binge drinking, heavy drinking and driving under the influence. Rural adolescents are considered to be particularly vulnerable to the availability of marijuana because of the ability to reproduce the substance in rural regions (Heck, Borba, Carlos, et al., 2004). Rural youth also require more follow-up intervention after substance abuse treatment is completed when compared to urban youth (Hall et al., 2008).

Sexual Health

Rates of adolescent childbearing in rural US counties exceed rates in urban counties nationwide with approximately 5% of young adolescent women in rural counties becoming pregnant between ages 15 and 19. These high pregnancy rates come at a significant cost to the public estimated at \$10.9 billion annually (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2014).

There is a need to educate and engage of adolescents on sexual health topics. Adolescents represent only 25 % of the sexually experienced population yet acquire nearly 50% of all new sexually transmitted infections (STIs) (Eaton et al., 2012). For Kansas, the Center for Disease Control noted in a 2015 State Health profile that rates of chlamydia among women were 573.8 cases per 100,000, ranking Kansas 35th of all 50 U.S. states. Of these reported cases, approximately 2,750 were of women ages 15 to 19. Barriers to accessing quality sexual prevention services include lack of health insurance or ability to pay, lack of transportation, discomfort with facilities, lack of teen-friendly services and concerns about confidentiality (Centers for Disease Control and Prevention [CDC], 2011).

Mental Health

More than 85% of rural residents live in a mental health professional shortage areas (Smalley, Yancey, Warren, Naufel, Ryan, & Pugh, 2010). Because of this shortage, 65% of rural residents receive mental health services from their primary care physicians (Gale & Lambert, 2006). Research has also shown rural residents are more likely to use pharmacology versus psychotherapy for treatment of mental health disorders -- not due to the patient's preference for pharmacological services, but due to the likelihood that rural residents will receive treatment from primary care physicians and may not have access to psychotherapy treatment. Despite the need or services, mental health workers in rural schools receive less training and have fewer hours available to students compared to schools in urban areas (Van Gundy, 2006).

Access to Services

Many rural adolescents will remain underserved and without primary or preventative care due to an inadequate number of health providers. The national 2005 American Medical Association and American Osteopathic Association physician survey showed that from 1988 to

1997, medical school graduates had only a small increase in the amount of medical doctors (1.3 percent) and doctors of osteopathic medicine (1.5 percent) entering rural areas to practice medicine. Data also indicated that only 1.4 percent of medical graduates had residency experience in a rural setting (Chen, Fordyce, Andes & Hart, 2010). Garrison and Jakel (2011) estimate that only 3 percent of new graduates will practice medicine in rural areas. According to the Kansas Department of Health and Environment, 53 of the 105 counties of Kansas meet the criteria as a governor-designated medically underserved area which includes counties that have less than one primary care physician per 2,695 people (kdhe.gov, 2014).

Chapter 3 - Methods

This study explored adolescents' views of their health issues and needs – that from a phenomenological perspective – lies in the lived experience of the informants (Moustakas, 1994). The goal of the study was to elicit the collective “voice” of adolescents. That is, their ideas, opinions, attitudes, knowledge and actions as a whole (Kirshner, O'Donoghue, & McLaughlin, 2005).

Participants

This study utilized data collected for a larger focus group study of adolescent health conducted by the Kansas Adolescent Health Project staff in 12 towns across Kansas. Participants included in this study were 65 adolescents from six different focus groups conducted in four rural Kansas counties: Barton, Dickinson, Neosho and Wilson. Adolescents aged between 13 and 19 years old ($Mean = 15.83$; $SD = 1.31$). Of the 65 adolescents, 18 were male, 47 were female, 83% identified as White, 10.8% as non-White Latino, 1.5% as African American, and 4.7% as Multiracial. Details of the participants are presented in Table 1 (See Appendix C). All participants signed an Informed Assent form (See Appendix A) stating that they wished to be a part of the study. While many of the participants were under the age to give legal consent, assent forms were created to inform them of the study although no consent was required as directed by Kansas State University's Internal Review Board (IRB).

Data Collection

Data was collected through focus group discussion by utilizing a semi-structured interview guide (see Appendix B). Discussions averaged approximately 45 minutes per group. The first set of questions pertained to the type of health issues adolescents faces followed by

ways to address the health issues, gaps, and barriers to receiving services and to obtaining better health.

Focus groups provided adolescents a safe space to anonymously express their perceptions of their own health needs. Fostering adolescent youth “voice” through these focus groups may have benefited the communities as they often spur adolescents to become advocates for their own needs, seek out services in their communities, and share their health literacy with others (Johannes, Miller, & Busk-Washburn, 2015). Community discussion groups provided an atmosphere conducive to hearing what adolescents knew and personally felt about health services and issues, specifically pertaining to their own experiences, as well as experiences of those within their age group.

Kansas Adolescent Health Project staff comprised of one faculty member, six graduate students (including the researcher) and one undergraduate student. The project staff worked with local collaborators and contacts (e.g., public health departments, extension personnel, family and consumer sciences school faculty, mental health center staff, medical school colleagues) to schedule the focus groups, recruit participants, and communicate the intent of the project to local media. Local collaborators were research and extension personnel as well as public health directors residing in the target communities. These individuals recommended additional key community stakeholders at local schools, 4-H clubs and out-of-school programs to help organize the focus groups of middle and high school age adolescents. Focus groups were held during a two-week time span in October of 2014. All groups were held during regularly scheduled in-school class sessions, regularly scheduled out-of-school program sessions, or regularly scheduled club meetings in target communities.

Prior to starting the focus groups, project staff were briefed on focus group techniques by two Kansas State University staff members who have previously conducted such groups for the Kansas Department of Children and Families. Each group had one moderator and depending on the size of the group, one or two note takers. Group moderators were relatively close in age to the participants so as to create comfortable environment. The moderators sat with the participants in discussion circles to foster a sense of belonging, safety, and equality. Prior to beginning the group discussion, the moderators briefly explained the project and the purpose of the discussion as well as how the information would be used. Facilitators assured the participants that there was no right or wrong answer to any of the questions, and that the participants' personal input was important in creating and implementing interventions and programs that would be suited to the specific needs of each community. Discussions were audio-recorded, transcribed and compiled with the notes from each session for analysis.

Data Analysis

Data analysis included three levels of coding - open coding, axial coding and selective coding (Glaser, 1978). Open coding involved identifying and categorizing raw data at a basic comparative level of line-by-line analysis (Strauss & Corbin, 1990; Walker & Myrick, 2006). Axial coding identified relationships and connections between established open codes. Once core categories began to emerge and no new categories were discovered, selective coding began. Here, only data that was relevant to the emergent categories was selected for inclusion in the findings. Related concepts combined to form sub-themes within larger themes.

Transcribed data from the focus groups was analyzed by the researcher and another graduate student. The use of multiple analysts help ensure confirmability and dependability of the findings (Lincoln & Guba, 1985). Each transcript was analyzed via open coding separately

by each analyst. After analyzing the first transcript, both analysts met to converge their findings. If differences of opinions arose, discussions ensued until consensus was met. Relationships and connections between established open codes were identified and were collapsed to form the initial set of broad themes. This same process was repeated for the second transcript. Thematic findings from the first and second transcripts were collapsed and combined. This process of comparing and contrasting across transcripts, known as triangulation (Lincoln & Guba, 1985), helps ensure the credibility and trustworthiness of the findings. The same process was used on all subsequent transcripts. Upon completion of axial coding, selective coding ensued. The final themes, sub-themes and excerpts from the transcripts are presented in the findings section.

Self of the Researchers

I am a 24 year old, white male, born and raised in a rural county in south central Kansas. Growing up in a six person family with both parents and three older siblings, I was fortunate in not having to experience the challenges and hardships that so often exist for rural youth today. Our vibrant rural farming community provided a safe, warm, and caring place to learn and grow. It was located approximately 15 minutes from a larger community with several health care options, as well as an hour from one of the larger metropolitan locations in the state. With this, my experience additionally included having a mother who was, at the time, a nurse, and is now a nurse practitioner, giving me a unique advantage in understanding health needs and having additional access to care. That being said, as I have grown and reflected on my living circumstances and opportunities, it is my realization that my experiences unfortunately are not the norm in rural settings and far too many youth go without their health needs being met - not having the same access and resources I once had.

The second analyst is a 24 year old Caucasian female from a large urban area in Kansas. She was the eldest child in a family of two children, although she gained two step siblings after her mother married following her father's death. While her childhood was not without some hardship, she acknowledges that her family was overall incredibly privileged. As a member of a middle-class family in a safe neighborhood, she experienced only minimal exposure to adversity. That being said, many of the issues and topics described by the participants were not common personal experiences for the second analyst; however, the analyst has been exposed to these things through her professional work as a therapist specializing in work with children and adolescents and as a researcher of adverse childhood experiences.

Chapter 4 - Findings

Data Analysis revealed several themes pertaining to adolescents' perceptions of health issues as well as numerous expressed needs to improve personal health and well-being. Findings were highly consistent across the six Kansas locations and were summarized according to the major themes expressed among all focus groups. Themes on adolescent health issues include making healthy choices, perceptions of invincibility, and poor role-modeling. Themes on adolescents health needs to improve their well-being include privacy, conversations, accessible healthcare, effective and accurate education, and a prioritization of healthy lifestyles.

Adolescent Health Issues

Two main themes emerged from the data analysis: *making health choices* and *poor role-modeling*. Adolescent healthy decision making appears to be influenced by convenience of healthy choices, knowledge of impact of decisions, awareness of long term negative outcomes, peer influence and social pressures, and poor role modeling or rearing from parents, siblings, and caregivers.

Making Healthy Choices

It appeared that adolescents faced multiple setbacks as they attempt to manage their health. Their challenges in making healthy choices included themes that surrounded food/nutrition, physical activity, stress management, boredom, sexual health and perceived invincibility. Each of these areas are elaborated below.

Food/Nutrition. Among healthy choices, food and nutrition was discussed among all focus groups. Adolescents often made food and nutrition choices based on perceptions of their own body image as well as self-esteem. Adolescents connected food and nutrition choices to

peer influence as well noting convenience of junk food, and a desire to see their friends as taking priority of spending more time, money, and effort to seek out healthier food choices.

School lunches were a major contention for the adolescents. Specifically, several adolescents complained about the inequality in the quantity of food provided at school. These adolescents felt that their growing bodies needed more food than that provided in schools and insinuated an inability to focus on anything other than being hungry. *“They don’t give us enough because we’re going through growth spurts and hormonal changes. We’re all like mentally unstable because we don’t know what’s happening with our bodies, so we need more food.”* (Abilene, KS) Hunger then led these adolescents to make poor dietary choices after the school day. *“Not getting enough to eat, that’s a big one right there, that causes you to go home and pig out because you don’t get enough at lunch.”* (Hoisington, KS) One adolescent shared how she did not think that this “pigging out” was a big issue considering that rural youth require a lot of calories because of their multiple responsibilities on home farms that require additional exertion of energy. The recent national calorie counting initiative influencing school lunches was seen as discounting the realities of rural youth:

Umm, also back on lunch, uh, how many calories we can consume, you know, whatever, it’s not a lot, I know it’s not just our school, but it’s still frustrating to think about because what a lot of people don’t think about, a lot of us do sports then go home and work on a farm so we work it off, and like that 800 calories does not stick with you, so there has to be something more for us, I don’t think that’s a way to solve the obesity problem. (Fredonia, KS)

An additional challenge that some adolescents faced was not having ample time to prepare or buy healthy and nutritious meals for themselves.

We don't have a whole lot of time to make it home and eat something... and the unhealthy stuff is what's quick and easy. We're gonna eat what's available. I only have a half an hour to eat dinner and do homework, I'm gonna do it as quick as possible. (Abilene, KS)

Physical Activity. Overall, adolescents described physical activity practices as positively benefiting their biological health, but noted barriers to physical health that were influenced by feeling judged by others when participating in physical exercise. As participants described their perception that others believe that those exercise must believe something is wrong with them, they noted a connection between rural community culture and people watching what others do. According to the adolescents, this judgement was a strong enough factor to prevent them from exercising in public, limiting them in options as they did not have access to a location to exercise elsewhere without adult supervision.

Challenges in engaging in physical activity included the lack of accessible exercise facilities, especially in the winter, transportation, adult supervision and how adolescents are judged/perceived if they did exercise. Adolescents noted the lack of accessible places to exercise. One adolescent reported that the school has a weight room that could be used, but barriers existed to utilizing the services due to the need for adult supervision. Adolescents also noted that the distance to indoor exercise facilities during the winter months as a barrier. For some adolescents, the closest town that had an indoor pool was a 30 minute drive but again noted that the lack of transportation was a barrier to accessibility.

Another issue for adolescents was the judgment they perceived when exercising in public. Participants felt that others believed that the adolescent choosing to exercise was in some way unhappy or unhealthy. This is elaborated in this excerpt:

Judgment, like oh you have to work out because you're fat you can't just work out because you like to work out, it makes you feel good, like, people think, oh she just works out because she's fat or oh she thinks she's fat, but like, I've gone on like four runs now and every time, like at least ten, twenty people are like... they break their necks to look.
(Herington, KS)

Stress Management. Stress encompassed many of the health topics discussed by the adolescents. Adolescents expressed dyadic thought in that their peers are either stressed and succeeding in school or denying any stress, using substances, and in turn, not being successful academically, wanting to escape from their problems. Many adolescents noted experiencing stress from peer pressure and the desire to “fit in” and resorting to unhealthy means such as alcohol and drugs to manage these stressful situations. *“Drugs, sex, self-harm, suicide, bullying, even eating . . . we don't know how to deal with stress. It's an escape.”* (Chanute, KS)

The stress from having to juggle multiple roles and responsibilities -- as students, athletes, employees, caregiver to younger siblings, children to their parents and agriculturally-related chores for those living on farmsteads. These multiple roles were perceived as constraining:

Shoot, I get home late, and parents are expecting me to go outside and do the chores, and I'm like, I'm in trouble, if you live out of town it's super hard, very hard if your parents work late at night in the city, and I'm like crap, I have to get food for me and my little brother, so you're trying to take on your parents responsibility. (Fredonia, KS)

A common and disturbing stress was bullying, specifically cyber bullying that targeted body image. Adolescents believed that negative body image may explain the over indulgence in unhealthy foods, use of substances, and even suicide. As explained by one adolescent, *“Yeah, it*

(bullying) can lead to suicide, because it's stressful and can lead to killing yourself or lead to them killing someone... it could lead to someone starving themselves and eating disorders."

(Chanute, KS)

Several focus groups discussed stress from chronic illness of either themselves, a peer, or a sibling. Managing chronic illnesses such as, diabetes, epilepsy, and ADHD were a concern for many adolescents'. Participants noted feeling helpless not having the means to manage illness and this caused their stress to spill over to peers, and teachers. This was elaborated by one adolescent with diabetes:

I have like typhoid [and] diabetes. There's been days when I'm just really low and don't know where I'm gonna be able to get a snack, and if it comes down to an emergency and no one knows. They couldn't get me something from the kitchen. I mean it adds stress to my life, like not knowing if I will be able to find a snack, but also my friends, they know they have to deal with it, they want to be there to help...It causes stress to teachers too.

(Fredonia, KS)

Boredom. Adolescents expressed concern that the lack of facilities in their towns to engage them in healthy activities meant boredom for many. This boredom they believe explained the risky behaviors of many adolescents such as substance use, partying, drinking and driving, and risky sexual activities. One teen simply stated, "*Bored, nothing else to do.*" (Great Bend, KS) during group conversation after being asked what other factors exist other than stress explaining the use of drugs and alcohol. One participant shared that they believed adolescents did not seek healthcare because the desire to socialize with friends outweighed the importance of seeking care. "*Boredom, they want to see their friends.*" (Abilene, KS)

Sexual Health Issues. Sexual activity and unprotected sexual activity were discussed in several focus groups. Aside from boredom, adolescents reported that sexual activity is a health issue for adolescents because their peers may be having sex without fully understanding the consequences of being sexually active. As one participant put it: *“That (teen sexual activity) could lead to physical health issues too because what if, you know, what if she got something, such as a disease, or a child.” (Hoisington, KS)*

Peer pressure appears to largely impact adolescent decision making as well as increase the stigmatization of seeking sexual healthcare. Adolescents expressed concern that the belief that it’s “cool” to have sex may lead some adolescents to not practice safe sex. One adolescent noted that a lack of sex education hinders adolescents who are already sexually active to practice safe sex:

Just a lack of sex ed(ucation), people don't know how to be safe, they don't- and like um if they were to have a problem I don't think they would know where to go, or who to talk to. They would just kind of ignore it either and might end up with some health issue, infection or child. (Herington, KS)

Adolescents highlighted the differing standards and labels for males and females pertaining to sexual activity. Both male and female participants agreed that sexual activity was more socially acceptable among males than for females. *“If a guy does it (have sex), he’s cool, but if a girl does it (have sex), she’s a slut.” (Chanute, KS)* Another participant added, *“Yeah, if you’re a guy, your buddies and stuff, they all think it’s (having sex) all cool. But if a girl does it (have sex), they get called names and stuff like that.” (Chanute, KS)* Adolescents further noted that being labeled “slut” prevented females from seeking help while males did not want to seek help at all.

They (guys) don't want help, they want it (sex) more. Like "Awe, I have this problem having sex," no they don't say that, they say I want to go do it more, they think it's cool, and the guys are like, high-fives and woo-hoos. (Chanute, KS)

Perceived Invincibility. Adolescents realized how believing that they were invincible -- which they felt was developmentally appropriate -- explained the risky behaviors of their peers. One participant stated, *"They (peers) think that it might happen to them (other people), but it won't happen to me."* (Abilene, KS) Another adolescent from a different location supported this idea: *"A lot of people just don't think it's going to happen to them."* (Great Bend, KS)

Adolescents' discussions in the focus groups led them to gain insight into their behaviors that were risky. Specifically, adolescents connected that a perception of invincibility led to many adolescents making poor health choices. Many adolescents felt that their current developmental stage may be responsible for their inability to control impulses – creating a perception that the immediate benefits of risky behaviors outweighed potential consequences – helping put their behaviors in context.

Poor Role-Modeling

Themes of poor role-modeling across several systemic levels emerged during discussions. The findings point to role models that, similar to the adolescents themselves, lack the skills, educations, and/or resources to choose healthy practices whether that be food choices, physical activity practices, substance use, positive coping strategies, texting and driving, or a slew of other risky behaviors. Adolescents shared how they learned unhealthy behaviors from peers and family members as well as from media. One adolescent shared how adolescents in general learn from family members and friends: *"We learn to do alcohol and drugs from our older siblings, friends, and parents."* (Hoisington, KS)

Peer Role-Modeling and Peer Pressure. Several adolescents shared that although they are taught to not engage in unhealthy behaviors, it was not uncommon for them to witness their peers doing so which, in turn, invites others to follow suite: *“I hear people are at school going to parties, and they’re all talking about how they wanna go out and have fun and get drunk and what not.” (Fredonia, KS)* Another adolescent shared how drunkenness was not uncommon in schools: *“People have shown up drunk to school before.” (Fredonia, KS)*

Adolescents noted that these experiences often were accompanied by pressure to engage in similar behaviors because of the desire to be accepted by their peers. One adolescent explained:

When I was with my friend one time. We were walking and he pulled out a can of chew (chewing tobacco), and started putting it in his mouth and handed it over to me and said “Do it.” And I said I didn’t want to do it, and he said, “Come on it’d be fun.” And he was peer pressuring me and you know, people get peer pressured into doing that which causes them to you know, lose that (friendship). (Fredonia, KS)

Familial Role Models. Adolescents noted that parents were often participants of several risky behaviors such as supplying alcohol, hosting parties, and engaging in texting while driving. Adolescents noted that observing these behaviors was confusing because the same people who preach healthy behaviors do not ‘do as they preach’. *“When my dad’s driving sometimes he’ll be like on his phone looking at it, well if you, if I was on my phone you would tell me to get off, so why don’t you (my dad) get off your phone.” (Herington, KS)*

Adolescents also noted that parents’ unsuccessful attempts to re-direct have consequences on other children in the family who are observing and learning. One participant shared a story of a parent’s attempt to redirect sibling substance use:

Recently my step dad found out that she's (my step sister) partied, had sex, she drinks, she smokes weed, smokes cigarettes. I think a big part of it is that parents or guardians aren't stopping it you know, aren't cracking down on it. So my step dad gave my step sister an option for her to stop smoking weed if she smokes cigarettes, and if she stopped. Since she's not 17, he'd pay for them. (Fredonia, KS)

This adolescent noted the systemic impact of these behaviors, *"It wasn't just effecting my step sister, it was effecting my whole family, like I have two little brothers, and like, that's influencing them, and of course she didn't follow the rule of not smoking weed and drinking". (Fredonia, KS)*

Media Influence. Adolescents attributed a large number of health issues to media influence including self-image, self-esteem, education and misinformation about healthy practices, and cultural influences around risky behaviors. One adolescent addressed media's influence on body image:

Everyone's always looking at the magazines and the people with the perfect bodies. Like the bar is set so high for the perfect image. If they (readers) don't have the right self-image they do something bad, they take this pill, or do this or do that, but then they don't, they wanna take the easy way out but they still want to get to this photo shopped image of what people think the correct body image. It's (their bodies) never good enough. (Abilene, KS)

Another adolescent spoke of how songs can be influential too and that many song lyrics promote unhealthy behaviors:

Maybe if pop music was better, like all these (current) references are about like objectifying women, drugs and alcohol abuse, you know, partying -- like it's all, that's

what it's (songs are) all about, and that's what people listen to, and it's stuff teachers are saying don't do. (Abilene, KS)

Many participants were concerned about how adolescents were turning to online resources for health information. While noting that online resources can be helpful, participants also noted that there is a potential risk of being misinformed that in turn may lead to adolescents pursuing dangerous health practices. One participant elaborated on how it is not an easy task to decipher the vast information accessible online and experiencing difficulty in knowing what is accurate:

There's so many things -- like you can Google something and you'll have 40 different diets pop up -- like this celebrity's doing this so you can look like her and everyone believes it for whatever reason. So I guess the challenge would be like what do you like, who do you believe? (Herington, KS)

Adolescent Health Needs

Analysis revealed five needs: privacy (including fear of judgement, embarrassment and shame, and trust), conversations on health matters, accessible healthcare, effective and accurate education, and prioritizing of healthy lifestyles. Reported needs for adolescents to be able to improve their health and well-being seem to point towards privacy including a fear of judgment that fuels embarrassment and shame for seeking healthcare services – leading to an inability to trust healthcare providers and other adult supporters to keep their issues confidential. Findings also point to a strong desire from youth to having deep, meaningful, and ‘real’ conversations with adults and care providers about topics in preventative healthcare that are often uncomfortable to discuss. Within these conversations exists a need for effective accurate

education so adolescents are not left guessing with the vast amount of information and misinformation bombarding them from current media outlets.

Privacy

Adolescents need privacy. Privacy so they would not fear being judged and embarrassed or shamed for seeking healthcare especially pertaining to sexual health. The need for privacy also meant that adults had to have confidence that adolescents could manage their own health. *“They’re (adolescents) afraid to open up to someone (health care providers)... you don’t want them to tell anyone else, it might get back to your parents. You can’t trust anyone.” (Chanute, KS)*

Fear of Judgement. The following statement captures adolescents’ fear of being judged for seeking much needed medical services:

It’s not as easy for you to walk into a place by yourself and be like, uh, I don’t know if I’m pregnant or not but I’d like you guys to check me out. You can’t do that...well you could but we’re in such a small town, it would get right back to your parents immediately... and you don’t want them to think differently of you. (Herington, KS)

The small size of communities impinges on privacy preventing adolescent’s feelings of safety when walking into a clinic for services. The fear of being judged for seeking services, such as for gynecological issues, was noted as one reason why adolescents needing privacy turn to the internet for health information. Adolescents relied on what could potentially be unreliable information in an attempt to resolve their health problems. Participants in several focus groups spoke of the fear that any information they seek would be known by their parents. These adolescents perceived that parents would not approve of adolescents seeking certain health information and services and this may damage the parent-child relationship. As explained one

adolescent, *“Obviously they (peers) feel like their parents can’t help because they’ll get in trouble. You don’t want them (parents) to think differently of you. Your parents might make you feel unwanted or they might dislike you.” (Chanute, KS)*

Embarrassment and Shame. Many adolescents discussed experiencing embarrassment and shame because of the perceived stigma around seeking services such as for mental health issues. The fear of embarrassment and the lack of privacy was cited as a reason that adolescents do not admit that they have a problem or seek help leaving them to fend on their own:

They don’t admit they (peers) have a problem because they’re embarrassed, like, if you have a problem, you don’t want to tell anyone else, like you don’t want anyone else’s help. You want to fix yourself and you can’t ask anybody else. (Chanute, KS)

Participants also discussed embarrassment in purchasing contraception, seeking out ways to purchase it without anyone knowing. *“They might be embarrassed to buy it (contraception), if I was a guy I would be very embarrassed to buy that from the store. I’d go to like one of the little quick shops and go into the bathroom... they have those (contraception dispensers) in some bathrooms.” (Great Bend, KS)*

Trust. The lack of privacy that adolescents experienced around health issues was attributed to the lack of trust adults had for adolescents. These adolescents believed that if adults -- parents and teachers – trusted adolescents to take responsibility for their own health, they would have more privacy. In turn, this would equate to more adolescents seeking and receiving the services they need. The need for parents’ or care providers’ permission to access healthcare was cited as an impediment to adolescent health. Adolescents’ health was considered impaired by the current system that required adult supervision in seeking and paying for healthcare.

Conversations on Health Matters

Findings point to a strong desire from youth to having deep, meaningful, and ‘real’ conversations with adults and care providers about topics in preventative healthcare that are often uncomfortable to discuss. Within these conversations exists a need for effective accurate education so adolescents are not left guessing with the vast amount of information and misinformation bombarding them from current media outlets. As one adolescent put it, *“We (adolescents) want people to ‘be real’ with us. Tell us about the real life-threatening consequences of teen pregnancy. Teens need to know what it’s really like to have a baby. What it’s really like to have an STD.” (Great Bend, KS)*

These conversations were to be had with all systems that influence adolescents’ lives be it their peers, parents and siblings, teachers and educators, and media messages. The lack of education was frustrating for adolescents who were tired of simply being told to not partake in certain unhealthy behaviors: *“There aren’t any programs that I know of that educate kids on drugs and alcohol like thoroughly, they (programs) just say drugs are bad, alcohol is bad, and that’s it, or they’ll describe how they’re bad.” (Abilene, KS)* It appears that adolescents are listening and want to hear the factual truths and not be coddled or shielded from the realities of life.

Accessible Healthcare

Several accessibility issues exist for rural adolescents. Needs expressed included affordability of preventative healthcare, services that are closer in proximity to their communities, as well as a need to have services available during school where adolescents spend a vast majority of their time.

Accessible also meant affordable. The cost of healthcare was noted as a possible reason why seeking medical care may not be an option or delayed because it was not seen as worth the cost. An adolescent who endured a broken wrist for seven months alluded:

I know everybody can't afford to go to like yearly checkups or buy yearly checkups, cause I know for the office in town I think it's like 80 dollars per office visit. At least the doctor I would go to, so um and that's with insurance -- good insurance. So I don't, I don't know if people like they don't go to the doctor a lot because it's not worth it to go right away, so you don't go to the hospital for three months, like, my wrist was broken for seven months. (Herington, KS)

This adolescent recognized that it was not just the cost of healthcare per-se but the cost of preventative services that made healthcare itself a low priority.

Adolescents discussed the need for not only affordable healthcare but resources (such as food) that can help them achieve and maintain a healthy lifestyle. The ability to afford healthy food was noted as an obstacle to achieving a healthier life. Not only was cost a concern but that with only one grocery store in town, a lack of alternative choices was evident and caused a perceived increase in prices:

Healthier foods are really expensive compared to like Burger King or whatever and for somebody that has a part time job just trying to pay for like a college class and deposits and stuff like that can't really buy extra stuff like that to stay healthy and in a small town like this there's only one real place to get food and so one place that can drive up prices. (Herington, KS)

An increasing barrier to accessing healthcare in rural areas was the distance to health centers. One participant explained how the distance to a medical specialist determined the

frequency of visits: *“My diabetic specialist is in Tulsa and we have to see him every few months.” (Fredonia, KS)*. Several adolescents believed that technology and the internet could reduce the need for health centers. The ability to share medical recourses such as home remedies for ailments with an online community appeared to be an acceptable alternative to seeking healthcare from a trained, licensed and certified medical practitioner:

They (adolescents) have the resources to learn about it (health issue), you can go on google and find out about anything, just about anything. Sharing is an easy thing -- we can tweet whatever we want, know Facebook, whatever...Someone in Oregon could help someone in Florida, you know with a home remedy. They can share that. (Abilene, KS)

Effective and Accurate Education

The need for effective and accurate education was discussed in all six focus groups. Adolescents expressed concern that the information their peers were getting online was incorrect and misleading hence, the need for in-depth, detailed, and meaningful education on health topics impacting adolescents today. Educators had to be able to connect with adolescents. One adolescent believed that peer education may be more effective than being taught by an adult:

If it's a 40 year old guy talking about it (health issue), you know, some of us are going to pay attention, but most are gonna be like, he's too old for us. But if it's a teenager that comes in and says listen, these things can happen. But because I'm a teenager I'm gonna understand more, I'm gonna listen and say wow, I am not invincible. (Fredonia, KS)

Several adolescents mentioned liking the discussions that were taking place for this study in which adolescents come together to share their experiences and alluded that a similar setting could be used to disseminate health information/education: *“More like, teenage friendly conversations among adults like these (Patting hand on table referring to focus group*

discussion)... respectful mature topics like, no like, dancing around the subject, like tell us... we need to know". (Herington, KS) Adolescents also discussed the need for education on current health issues not only for adolescents but for adults as well, specifically noting that education should include adolescents and parents together.

Maybe...having classes about it (health issues), where parents and students can come in and there's some way to educate them (adolescents) about it (health issue) and educating that just because we're teenagers, doesn't mean we're invincible, doesn't mean that what we're doing to our bodies now isn't going to affect us 20 years down the road. (Fredonia, KS)

It appeared that adolescents may value and want the perspective of adults, especially their parents and want a way to learn from them.

Prioritizing Healthy Lifestyles

Adolescents expressed a need for prioritization of healthy lifestyles across health issues including placing preventative care over convenience. Adolescents realized that healthy choices existed, but the choice they made was based on convenience not health. Participants were aware of the potential risks of using substances, being sexually active, unhealthy eating, and living increasingly sedentary lifestyles, but stated that adolescents would take the risk is it did not affect them negatively in the moment. Laziness was another reason cited for not prioritizing a healthy lifestyle as described by one adolescent:

One reason that they might not do that (increase healthy practices) is laziness... I could go run on my treadmill or I could just be on my phone and spend three hours on my phone on social media and sit there like in laziness, like, the easy way out, that's really what the big problem is, you don't ride your bike because it's the easy way out, you take

drugs to make you feel better because it's the easy way out, you don't do well in school because it's easier not to focus on your school work, it's easier to not, be financially responsible. (Abilene, KS)

Chapter 5 - Discussion

This focus group study explores the health issues and needs of rural adolescents from the perspective of the adolescents. The findings provide important information that can help mitigate some of the obstacles to accessing healthcare in rural settings. The findings speak to the complexity of adolescent health that goes beyond the mere availability, accessibility and affordability of healthcare or the interconnectivity of biological, psychological and social factors proposed by the biopsychosocial model. Although all the aforementioned are crucial in enhancing health, when considering rural adolescent health, the context of living in a rural area where exposure is lacking for the community as a whole needs to be considered.

Lack of exposure and resources to educate run the risk of brewing biases against those who are not well – mentally or physically (Link, Phelan, Bresnahan, Stueve & Pescosolido, 1999). Biases can lead to the stigma of seeking healthcare as alluded to by the adolescents in this study. Stigma leads to distancing and fear promoting (Substance Abuse and Mental Health Services Administration, 2006), making it difficult and at times impossible for adolescents to seek the care they need. Adolescents that need reproductive healthcare and mental healthcare seem to be the ones most fearful of seeking services. So even if the all forms of healthcare are made available and accessible, the lack of privacy that often times is imbued in rural communities prevent adolescents from benefiting from services.

Another factor that needs to be considered is the nature of adolescents and how this period of development interacts with their overall health. We know that adolescence is a time of tremendous change and identity seeking (Rivara, Park & Irwin, 2009). This phase includes a high level of curiosity and with that risk-taking. The highly impressionable stage of adolescents make educating using traditional means a challenge and maybe even obsolete. Interestingly, this

group of rural adolescents are savvy enough to know that not all information especially available on the World Wide Web is reliable. Perhaps the cultural method of story-telling used to pass on teachings from one generation to another is still alive in rural adolescents. It is through open dialogue and real conversations with adults that adolescents believe they would best reap the type of health information they yearn.

However, even when armed with accurate information and having the options to improve well-being, adolescents may make choices that contradict their desires to live a healthy life. Making poor choices is a feature of adolescence – a period of exploration, carving out a unique identity, not from a cookie cutter mold, succumbing to peer influence/pressure and not able to fully decipher what is helpful or harmful. What seems to augment these poor choices is a lack of positive role-models. Adolescents look for role-models in their parents, siblings, peers and community. The absence of positive role-models means adolescents have only unhealthy role-models to emulate.

Role-modeling that is not uncommon in rural communities is the overextension of people due to the lack of manpower. Farming is often a family affair with everyone, even the youngest child, chipping in. For rural adolescents, after school may mean extracurricular school activities, getting to their part-time jobs, completing school assigned homework, as well as completing household and farm chores. Farm chores can also require adolescents to rise early meaning reduced sleep and time to prepare healthy snacks for school.

All of the above contribute to the intricacies of rural adolescent health. While there is the reality of lacks in healthcare – availability, affordability, and accessibility – the truth of the situation goes beyond to include aspects of the biopsychosocial model and more. The additional factors that contribute to adolescent healthcare in rural settings lies in the communities

themselves. Common features of rural settings where everyone knows everyone, though integral in developing a sense of homeliness and belonging, can be an impediment to privacy. The value of hard-work is to be proud of but in the context of adolescents who need time to learn, absorb, think and grow, it means being overextended and having little time to prepare and ponder. Life then becomes one filled with convenient and swift choices.

Attaining and maintaining good health is a lifelong process. Learning how to be healthy takes time and effort. Communities that lack recreational resources that can offer the downtime to unwind, engage and re-energize do a disservice to their adolescents that are active and thrive when in motion. The lack of healthy forms of recreation can breed boredom and consequently engagement activities that may not be the safest or healthiest.

To conclude, the healthcare needs of rural adolescents are compounded by their environmental context that are unique and involves multiple systems – family, school, peers and healthcare providers rooted within communities that unless make changes, prevents their adolescents to become thriving contributing citizens. Together with adults, adolescents have a vast potential to create positive, effective, and sustainable change in the world today and are advocating for change throughout their lives, and throughout the communities that they belong to. It is crucial that communities seek to hear, strengthen, and empower young people.

Limitations

Although this study is one of the few that provides insight into the world of adolescents in rural settings, it is not without limitations. The study including only rural-densely populated locations and excluded frontier locations because sites were predetermined by the Kansas Department of Health and Environment (KDHE). Furthermore, the six communities included in this study represents only three Kansas areas - southeast, central, and southwest. The use of

modified focus groups offered flexibility to participants but it meant a lack of adherence to standard focus group protocol. Three groups had more than the ideal number of six to ten participants: 15, 14 and 11 respectively.

Conducting the focus groups in a natural setting had many advantages but it did have setbacks as well. Groups that were conducted in schools were subject to interruptions common in schools -- one group had an interruption from the intercom system while another had an interruption from a paraprofessional educator walking into the classroom briefly, which may have influenced participant responses. It is important to note that discussions stopped while the educator was in the room, and resumed thereafter.

Healthcare Implications

The findings of this study suggests that health issues facing adolescents require systemic approaches including prevention, early intervention, and treatment strategies delivered at family, school and community levels. Families need to be educated about their role in adolescent health – from being role-models to having “real” conversations with their adolescents. Families also need to understand the impact of the multiple roles and responsibilities unique to rural adolescents’ health and develop strategies to help mitigate the burden from these multiple roles.

Contrary to general perceptions that adolescents don’t want anything to do with their parents, participants within this study deeply desired connection with their parents and adults in general. The outcry by adolescents for ‘real’ discussions about stress management techniques, consequences of substance abuse, realities of teen pregnancy and the importance of sexual health point to a deficit in families, schools and communities. The responsibility to education adolescents is that of a village. Families, schools and community stake holders (including religious institutes) need to develop effective means of communicating essential health

information to adolescents especially about reproductive health, substance use and risk taking behaviors.

Because schools are the primary location in rural communities where adolescents congregate, school-based access to confidential mental health screening, referral, and treatment that reduces the stigma and embarrassment often associated with mental illness, emotional disturbances, and seeking treatment must be established. School systems may be the ideal location to provide opportunities for adolescents to learn and practice socio-emotional coping skills as well as obtain crucial health information. As adolescents expressed a desire for peer health educators, school systems may want to consider tapping into high school adolescents as peer mentors to middle school aged adolescents.

Rural schools are often the beating heart of small communities and a center for familial activity. Thus, the systemic nature of the findings point to a need for greater collaboration with school systems to provide access not only to mental health services, but medical, dental, nutritional, and social healthcare as well. Healthcare providers who are notably “few and far between” in rural communities could benefit from collaborating with schools and the community as a whole to relocate some services to ease access and increase affordability.

Communities need to develop a more integrate healthcare that provides prevention, early intervention and treatment for adolescents and include adolescents in the planning. Such involvement would give adolescents “voice” and have stake in the creation and development of services. Integrated healthcare could be school-based or not depending on resources. Developing a healthcare center that provides access to general and specialized medical services, mental health services, nutritionist, pharmacologist and other allied healthcare may be a practical solution for some communities. Nevertheless, communities need to improve cataloging and

advertising agencies, organizations and programs serving adolescents including health-promoting recreational activities. For communities that lack recreational centers for adolescents, fund-raising to develop such centers is recommended.

Future Research

Future research on adolescent health issues and needs are indicated. Longitudinal studies that track rural adolescents' health over time as they experience transitions between middle school, high school, and college would provide information that could help identify points and timing of interventions. Gathering information from parents concurrently across time would provide more holistic account of adolescents' health needs.

Future research should include a thorough assessment of adolescents' current state of health, access to health resources and family demographics. Such information could help discriminate needs according to health conditions or other categories that in turn could help identify where the need is most urgent.

Similar studies need to be conducted in other regions such as frontier and in states other than Kansas to compare the states' conditions. Such information may support the need for resources from the federal government for all states, relieving individual states from being fully responsible to meet the health needs of its citizens.

Telehealth seemed to be alluded to during several discussions but was not mentioned outright by participants, but would be of interest in future research to explore its use as a viable option to begin to address availability, affordability, and proximity barriers in rural areas. If confidential services were accessible to adolescents in school or at home, it would inherently eliminate the proximity barrier as adolescents could reach a provider they need in a confidential manner to be able to discuss the current problems they are facing. In a study conducted by the

California Telehealth Resource Center and funded by the Health Resources and Services Administration (HRSA) of the United States Department of Health and Human Services (HHS), researchers note that the benefits of telehealth would not only include reducing proximity barriers, but would also improve overall health outcomes by having more people diagnosed and treated earlier. Early diagnoses and treatment are less costly – reducing high cost hospital visits, emergency room visits, and overall medical complications during treatment (“Why are Telemedicine and Telehealth so Important,” n.d.). Future research would benefit from exploring the potential benefits of integrating telehealth services with school districts in rural communities as adolescents often spend most of their time in school.

Finally, research on adolescents’ health experiences and health literacy should continue to include adolescents’ “voice” that can inform health interventions, health delivery and health promotion. All adolescents not only rural, can benefit from being empowered when their voices are heard.

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Appendix A - Participant Assent Form

Kansas Adolescent Health Project: Community Meetings, Focus Groups

This project, funded by the Bureau of Family Health, Kansas Department of Health and Environment (Dr. Debbie Richardson; drichardson@ksu.edu; 785-296-1311), gathers information about the health of adolescents (ages 12-18) in Kansas. Information collected by this project will help Kansas obtain federal funds to support adolescent health and maternal and child health. The current Kansas maternal and child health plan is available at: <http://www.kdheks.gov/bfh/>

Staff with K-State Research and Extension, Kansas State University are asking people in selected communities to comment on the health of people ages 12-18 in Kansas. Other than sharing your time and comments, there is little risk to you if you choose to participate in this project by participating in a local meeting. Though your responses, comments will be not connected to your name, you will be asked to give your age, gender, race, ethnicity, county of residence, and role in the community (e.g., student, health provider, teacher, parent) at the beginning of the meeting. If you have questions, please contact:

* Dr. Elaine Johannes; Principal Investigator, Kansas State University; ejohanne@ksu.edu; 785-532-7720

* Dr. Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224

* Dr. Jerry Jaax, Associate Vice President for Research Compliance and University Veterinarian, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224

Though Kansas State University's Institutional Review Board (IRB) does not require that consent be collected for participants in this project, we request that you agree to participate by signing the appropriate blank below:

Adult signature

Date

If you are under age 18, sign this line to agree to participate in the project. You can withdraw from the project at any time without penalty or risk.

Date

THANK YOU!



Appendix B - Focus Group Questions

2016 KANSAS ADOLESCENT HEALTH FOCUS GROUP QUESTIONS

1. What do you consider to be the **most important health issues** for teens today? (This is where we try to see what teens think are the most important, pressing health issues.)
2. What do you think are **gaps in health services** for youth?
3. What **barriers or challenges** do you or your friends face that keep you from being healthy? (Examples may be peer pressure/peer influence, cost of healthy options. Do they have a doctor, provider, insurance? Is lack of information or embarrassment a factor?)
4. What **recommendations or suggestions** do you have to address these barriers or challenges?
5. (POTENTIAL) What do you think is **going well or is happening that is helping** teens be healthier?
(Can include things taking place in school, clubs, organizations, family, and community.)
6. Is there you want to say about adolescent health or your experiences related to health services for adolescents?

Appendix C - Descriptive Statistics of Participants Table

Table 1. *Descriptive Statistics of Participants*

County	Town	Number of Participants	Male	Female	Race (%)	Age Range
Barton	Great Bend	15	0	15	African American: 0% Hispanic: 47% White: 47% Other: 6%	15-17
	Hoisington	9	5	4	African American: 11% Hispanic: 0% White: 89% Other: 0%	15-19
Dickinson	Abilene	7	3	4	African American: 0% Hispanic: 0% White: 100% Other: 0%	13-18
	Herington	11	3	8	African American: 0% Hispanic: 0% White: 100% Other: 0%	14-18
Neosho	Chanute	14	5	9	African American: 0% Hispanic: 0% White: 86% Other: 14%	14-17
Wilson	Fredonia	8	2	7	African American: 0% Hispanic: 0% White: 100% Other: 0%	14-18
Total		65	18	47	African American: 1.5% Hispanic: 10.8% White: 83% Other: 4.7%	13-19