# The 'state' of tobacco: Perceptions of tobacco among Appalachian youth in Kentucky

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#### **ABSTRACT**

INTRODUCTION In Appalachia, youth tobacco-use rates remain higher than the U.S. national average. Past research has indicated that several factors are related to high rates of tobacco use among Appalachian youth (e.g. low socioeconomic status, rural lifestyles). Of the Appalachian states, Kentucky has one of the highest rates of youth tobacco use. The aim of this study was to explore views of tobacco among Kentucky youth living in Appalachian counties.

METHODS In Fall 2014 - Spring 2015, focus group interviews were conducted with middle and high school students (N=109) in Appalachian counties in Kentucky. Each focus group session included open-ended questions and was conducted by trained facilitators. Focus group transcriptions and field notes were analyzed for themes.

RESULTS Study participants described an entrenched culture of tobacco. Three themes exemplified this culture. First, adult behavior served to enable youth tobacco use (e.g. teachers ignoring dip use in class, adults smoking with youth). Second, tobacco is easily accessible to youth (e.g. restrictions on youth sales are often ignored, family members provide). Third, symbols of tobacco are prevalent (e.g. festivals celebrating tobacco heritage, tobacco barns, and tobacco marketing logos).

CONCLUSIONS Youth participants described a deeply rooted tobacco culture, which they believed was unlikely to change. Additional studies and health education efforts are needed in these rural communities. Further, stricter enforcement of tobacco sales and marketing restrictions may be helpful in protecting this vulnerable population.

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#### **KEYWORDS**

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#### INTRODUCTION

Despite some progress in lowering overall tobacco product use rates, youth tobacco use remains a cause for concern, with 5.6 million U.S. youth currently under the age of 18 predicted to develop a smoking-related illness leading to early death<sup>1</sup>. Further, the toll of tobacco use is disproportionately borne and influenced by factors such as socioeconomic status (SES) and geography<sup>1,2</sup>, putting some youth at higher risk. For example, previous work suggests that rural youth are more likely to smoke and that life in rural Appalachia is conducive to risk-taking behavior, such as using tobacco<sup>3,4</sup>. Perhaps not surprisingly

then, youth tobacco-use rates in the 13 states in the Appalachian region remain higher than the U.S. national average, and Kentucky, with its history of tobacco as a cash crop, has one of the highest rates of youth tobacco use (e.g. 17.9% smoke combustible cigarettes)<sup>5</sup>.

Given the risks of beginning tobacco use early and the differential influences (such as SES and lifestyle), as well as the associated likelihood of disproportionate harm<sup>1,6</sup>, understanding rural youth views on tobacco and tobacco products is important. Such understanding provides the potential for developing more tailored and effective health

communication messages. The aim of this study was to explore views on tobacco among Kentucky youth living in Appalachian counties. As there is limited research to date that examines views of Appalachian youth, this study begins to address this gap in the literature.

#### **METHODS**

After securing university Institutional Review Board approval to conduct the study, middle and high school principals in three Appalachian counties of Kentucky were contacted with an invitation for their schools to participate. Kentucky was selected because of its high youth smoking rate (17.9%) and this rate has been resistant to change<sup>5</sup>. Further, many of Kentucky's Appalachian counties have poverty rates that exceed the U.S. national average of 15.5%, with the general poverty rate in the Appalachian area at 19%<sup>7</sup>. Counties (i.e. Elliott, Lee, Wolfe) were selected for study inclusion based on poverty rates exceeding the national average (31.8%, 37.2%, 40.5%, respectively)8, and categorization as a 'distressed area' by the Appalachian Regional Commission<sup>9</sup>. Prior to the focus group sessions, parents or guardians received a letter from the study investigators, distributed by school administrators, describing the study and including an 'opt-out' option. On the day of the focus group session, the middle and high school students were given assent forms and could decline to participate.

In Fall 2014 - Spring 2015, ten focus groups were conducted with middle school and high school students (N=109 participants). Each focus group session involved open-ended questions, was conducted by trained facilitators, and met during the regular school day. Questions covered several tobacco-related topics, such as perceptions of and attitudes toward tobacco and tobacco products; personal, family, friend, and community tobacco (e.g. where tobacco was used in the community, who used tobacco in the community) use; and tobacco marketing. The focus group sessions took approximately 60 - 75 minutes to complete. Using the constant comparative analysis method, focus group transcriptions and field notes were analyzed. Specifically, the materials were read repeatedly, and following an iterative process of open coding, categories and themes emerged. Each category and theme was frequently compared to others to identify connections, dissimilarities, and relationships<sup>10,11</sup>. Any differences in interpretation between investigators were resolved through discussion.

Of the participants, 53.2% were male and 46.8% were female. Their ages ranged from 12-19 (mean age 15.85, SD=1.7; median age 16, IQR=2), and 95.3% were white. Approximately 40% reported having tried cigarettes, and 13.2% reported frequent smoking (i.e. daily or weekly).

#### **RESULTS**

Across the focus groups, youth in these Appalachian communities described what they perceived as a deeply entrenched tobacco culture that was reinforced by family and community beliefs and practices. Several participants described stories told by their fathers, uncles and grandfathers about raising tobacco crops and preparing them for sale. These youth also described tobacco use as common and accepted, virtually everywhere, such as at community gatherings and in homes. Although they were aware of the health dangers of tobacco use and suggested that others in their community were as well, they were convinced that people in their community would continue to use tobacco. Three themes exemplified this culture. First, adult behavior served to enable youth tobacco use (e.g. teachers ignoring dip use in class; adults, including family members, smoking with youth). Second, tobacco is easily accessible to youth (e.g. restrictions on youth sales are often ignored, family members may provide). Third, symbols of tobacco are prevalent in many areas (e.g. festivals celebrating tobacco heritage, tobacco barns, and tobacco marketing logos).

One theme from the focus groups centered on community practices that enabled youth tobacco use. For example, many participants described adult facilitation of youth tobacco use. This facilitation ranged from adults ignoring youth tobacco use, such as not enforcing school tobacco-free policies or pretending not to notice that students were using dip in class, to adults engaging with youth in using tobacco. According to some participants, using tobacco with adults was a marker of 'growing up' in their community. In the words of one participant, 'When we finish hunting, we all sit around and smoke a few [cigarettes]. That's the way it's always been,

since my dad was little and his dad too'. Capturing the views of many participants, one stated, 'Once you get to a certain age, everyone just assumes that you use tobacco. It's just what people here do, especially boys'.

Another theme conveyed the ease with which Kentucky youth living in these Appalachian counties can obtain tobacco products. Virtually all of the participants described easy access to tobacco. In particular, high school students suggested that, despite laws prohibiting tobacco sales to minors, tobacco was easy to purchase in many places in their counties or neighboring ones. For example, one participant commented that, 'People here know everybody and try to help. If I want cigarettes, I can buy them. Someone selling them will help me out'. According to some, store clerks sometimes chose to overlook youth purchases and assume that the products were for parents. Additionally, some adults are perceived as not caring whether youth purchase the products, as they believe use by youth is inevitable. In fact, some family members provide tobacco products for their underage relatives. Participants shared a number of examples of such behavior. From a father picking up his daughter after school and handing her a lit cigarette to parents not commenting if cigarette packages are missing from their cartons to rituals of chewing tobacco and teaching younger family members to use tobacco, numerous examples of adults, especially family members, perpetuating or sometimes even encouraging tobacco use were common across these focus groups.

An additional theme conveyed the prevalence of tobacco in these rural Appalachian communities. Beyond family rituals, participants noted that symbols of tobacco are widespread. For example, one participant stressed that, 'If you look around, you'll see that tobacco was here, is still here. We don't think it will go away'. Another noted that his family's barn 'is full of tobacco things. [We] don't use 'em like before, but they are still there'. Despite significant reductions in growing tobacco as a cash crop, tobacco barns dot the farmland in these rural counties. These barns, some brandished with tobacco company logos or advertisements, are emblems of an earlier time when tobacco was the state's largest cash crop<sup>12</sup>. In earlier times, these barns were used to hang tobacco, essential for air-curing, and later to prepare it for sale (e.g. 'stripping'). Family and community members gathered there to work and also to swap gossip and tell stories. Some communities continue to host events, such as a tobacco festival, where the area's tobacco heritage is celebrated. One participant noted that 'school programs about the dangers of tobacco use' seemed to be in conflict with the 'tobacco festival'.

These themes exemplify the deep cultural roots that tobacco has in these rural Kentucky counties. From the vantage point of the middle and high school participants, tobacco use in their communities seems resistant to change. This perspective was shaped by observing that adults facilitate youth tobacco access and use; wide acceptance of tobacco; and symbols of tobacco, past and present, prevalent in their communities. Their experiences, especially when combined with current use and health statistics, illustrate the stranglehold that tobacco maintains in these communities. Further, these findings, especially given their alignment with previous research, suggest that youth susceptibility to and use of tobacco are shaped by both social influences, such as family tobacco use, and community influences, such as tobacco access and acceptance 13-16.

## **DISCUSSION**

This study examines perspectives on tobacco in an area where tobacco-use rates have been resistant to change and where smoking and other tobacco product use rates are high<sup>5</sup>. Examining youth views is especially important because most lifetime tobacco users start consuming tobacco products while they are minors<sup>1</sup>. Thus, understanding the perspectives of youth, especially in areas where tobacco use is high, is important in designing messages dissuading experimentation with tobacco and in cultivating perceptions of self-efficacy. For example, when selfefficacy is high, youth are more confident and better able to resist temptations and overcome obstacles, such as peer pressure to use tobacco or community norms that serve to encourage or perpetuate tobacco use. In particular, such understanding may help these youth envision methods to transcend the perceived entrenched tobacco culture and create healthier communities for themselves and their families. Further, if rooted in an understanding of the realities of tobacco acceptance and use in these

communities, health communication messaging designed for youth may be more likely to be taken seriously. These findings also suggest the need for health communication efforts directed at modifying the behavior of adults. Given the descriptions of adults enabling youth tobacco use and the ease of youth access to tobacco products, health messaging needs to target adults as well (e.g. to try to secure compliance with tobacco purchase age laws, to discourage adults from facilitating youth tobacco access and/or endorsing or ignoring youth tobacco use).

## Limitations

Despite these contributions, several limitations of this study should be acknowledged. First, these views may not represent fully the viewpoints of youth across the Appalachian region. Additional studies are needed with youth in other Appalachian states, both with histories of tobacco farming as well as areas with less community reliance on tobacco. Second, counties where poverty rates were high were selected for inclusion in the study; thus, the findings may not represent the views of youth in more affluent counties. Third, although these middle and high school students seemed comfortable and willing to share their experiences and viewpoints with us, their perspectives may not be generalizable to others who were not included in focus group sessions. Thus, additional research is needed to more fully understand perceptions regarding and use of tobacco products in these communities.

# **CONCLUSIONS**

Youth participants described a deeply rooted tobacco culture that they believed was unlikely to change. Across these focus groups, participants described the means by which adults enable youth tobacco use, ease of tobacco accessibility by youth, and community symbols of tobacco acceptance. Additional studies and health education efforts are needed in these rural communities. Further, stricter enforcement of tobacco sales and marketing restrictions may be helpful in protecting this vulnerable population.

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#### **CONFLICTS OF INTEREST**

All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none was reported.

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# PROVENANCE AND PEER REVIEW

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