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Adolescent health brief

COVID-19 Vaccine Sentiments Among African American or Black Adolescents in Rural Alabama

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A B S T R A C T

Considering the urgent need to increase vaccine uptake in Alabama, a rural state with the lowest rates of COVID-19 vaccination in the country, we conducted an exploratory study to elucidate sentiments toward vaccination among African American or black adolescents. We conducted in-depth interviews with 15–17 year olds in rural Alabama (N = 28). About 54% of our sample were female. Nearly a third lived with an older family member; 18% knew someone who contracted COVID-19. Using Rapid Qualitative Analysis, 3 COVID-19 vaccine-related themes emerged: influence of community leaders and older family members, fear of side effects and misinformation, and institutional distrust. To address COVID-19 vaccine hesitancy among rural African American or black adolescents, we suggest adopting a socioecological approach to public health messaging that addresses misinformation and government distrust and is delivered by local influencers with the social capital necessary to promote behavior change, namely older family members and Church officials.

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IMPLICATIONS AND CONTRIBUTION

Tailored messaging to reduce COVID-19 vaccine-related skepticism among African American or black adolescents in rural Alabama should address misinformation related to side effects and governmental distrust. Findings also suggest that older family members and Church officials have the social capital necessary to promote vaccination to rural African American or black adolescents.

On May 10, 2021, the Pfizer-BioNTech COVID-19 vaccine emergency use authorization was expanded to include younger adolescents [1]. Although studies with adults suggest reasons for vaccine hesitancy [2,3], few studies highlight adolescents' views toward COVID-19 vaccination, and to our knowledge, no such studies exist with African American or black (AAB) adolescents in rural settings. Considering the importance of promoting COVID-19 vaccine uptake in rural America [4] and among AAB

communities [5], we conducted this qualitative study in Alabama to ascertain sentiments toward COVID-19 vaccination among rural AAB adolescents. Alabama is currently a COVID-19 hotspot with the lowest rate of COVID-19 vaccination in the nation [6].

Methods

Participants were recruited through a Selma (population ~17,000) high school in May 2021. All adolescents agreed to participate (N = 28). Written informed consent was obtained. We conducted face-to-face, qualitative in-depth interviews, using a standardized guide. This interview guide included 4 domains assessing knowledge and sentiments related to the following:

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vaccines in general, HPV vaccination, COVID-19 vaccination, and local contexts or culture. Intent to accept COVID-19 vaccination and reasons for acceptance or declination were assessed. Recruitment and interviews continued until we achieved data saturation. Upon completion of interviews, participants were provided a \$35 incentive card. Audio-recorded files were professionally transcribed. Rapid Qualitative Analysis [7] was conducted to identify themes related to COVID-19 vaccination. The University of Alabama at Birmingham reviewed protocols and provided ethical approval (IRB-300006490).

Results

Participants were 15–17 years old and were currently attending high school; 54% were female and 46% were male. About 71% had health insurance. Over 30% lived with an older family member; 18% knew someone who contracted COVID-19. Half (50%) had accepted a flu shot in the prior year. Three COVID-19 vaccine-related themes emerged: influence of community leaders and older family members; fear of side effects and misinformation, and institutional distrust.

Influence of community leaders and older family members

Participants noted that their older family members' and community members' vaccine-related behaviors and sentiments influenced their own likelihood of accepting the COVID-19 vaccine.

Me seeing...my grandmother [changed my mind about the vaccine], she work at a nursing home. She was around numerous patients who had COVID. She was in contact with them and everything, but by her havin' two of the vaccine shots, she had not caught COVID yet.

Female_age15a

Today, I'm goin' to a football game, and [my grandmother]... told me to get it. I said, I did not wanna get it...That's why she was like, you wanna go ta these places? You need to get ya shot, so I'm goin' to go get it.

Female_age15b

...my pastor was sayin', it's like, y'all should go get this vaccine, so we can be safe up in here, since we got some church members who has taken the vaccine and some who have not. He was totally like, our Black folks in general, do not believe in this COVID, because y'all will not take the vaccine and it might spike again...He was like this vaccine is very important, so when they bring it back, and come back with it, ya'll should go take it. Keep all us safe. Keep your family and friends safe. The vaccine is good.

Male_age16

Fear of side effects and misinformation

Among participants, misinformation, obtained from peers and the Internet, and personal fear of side effects were intertwined.

I saw this video of this lady, and she said that after she took the vaccine, it gave her cerebral [palsy].

Female_age16

...his close friend got the vaccine, and then his foot was full, like fully purple. The whole time, his foot was purple and swollen.

Male_age17

That's kind of maybe for me [to accept the vaccine]. 'Cause I do not know the side effects of it, or I do not know what it can do to my immune system. I do not know if it gonna weaken it, or help it...

Female_age15

Institutional distrust

Participants expressed skepticism toward the government and healthcare systems.

...[my friends] just do not trust the government or the systems, and the fact that they think that [the vaccine is] gonna be chipped...

Female_age16

Yeah. I think the system or the government admits they're sneaky. They do not really care for the people for real. They just care about money and power...

Male_age17

I think [COVID-19 was] made up from the government...It's just ended up coming out of nowhere, like it was from thin air.

Female_age17

Discussion

Our findings suggest that the sentiments and behaviors of older family members and Church leaders may influence AAB adolescent vaccine acceptance, particularly in rural communities. AAB families are more likely to live in intergenerational households, and older family members are more likely to play a key role in the day-to-day of AAB adolescents [8–10]. Prior studies have highlighted the influence of the Church on providing social support and promoting positive health behaviors within AAB communities [11–13]. We also found evidence to suggest that institutional distrust, as well as misinformation related to side effects, may affect vaccine confidence (in addition to the fear of needles, a common fear among adolescents) [14].

Considering the importance of the Church in AAB communities [11] and that nearly a third of our sample lived with an older family member, a socioecological approach [15] that delivers vaccine promoting messaging at multiple levels may be warranted. If public health professionals and clinical providers are committed to promoting vaccine equity within adolescent health, then not only should scholarly communities listen to what rural AAB adolescents say about their lived experiences, but then our systems must respond by leveraging pathways and tailoring messages that are acceptable to rural AAB adolescents. Although this study provides a foundation for potential next steps, including targets for tailored messaging and identification of conduits to deliver messages, additional exploration is warranted to better understand what influences vaccine-related decision-making among rural AAB adolescents.

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