Introduction

• It has been well documented that urban solutions to public health issues have not been easily translated to rural areas, and thus often lose their effectiveness in such settings.
• With the progression of the COVID-19 pandemic, there is an increased need to understand how rural areas combatted the pandemic.
• The purpose of this study was to examine rural communities in the contiguous lower 48 states, especially in the context of a global pandemic.

Methods

Single qualitative case study

• Various community members were interviewed, and their responses were then examined in a qualitative manner using Framework Analysis

Study timeframe - January 1, 2020 to July 31, 2020

• Data collection - Interviews were conducted with a standardized list of questions & participant comments were simultaneously transcribed

Participants - Individuals seen as the major stakeholders in the community who were directly involved in the COVID-19 response & planning

7 total interviewees

- Director of Lake City Area Medical Center
- Director of Hinsdale County Emergency Medical Services
- Director of Silver Thread Public Health District
- Hinsdale County Public Information Officer/County Administrator
- Hinsdale County School District Superintendent/Principal
- Hinsdale County Emergency Manager
- Chair of the Lake City Board of Health

Data analysis - framework analysis

• Thematic based approach that is comprised of 5 steps, with the goal of creating a cohesive picture of the data

1. Identified a thematic framework for the interviews and compiled a table to highlight common underlying themes between the interviews


Additional common themes identified:

• Learning from nearby counties
• Benefits of pre-existing plans
• Impact on tourism & impact on the economy

Results

4 key themes:

Thematic Summary

- Importance of Partnerships
  - In order to survive, each participant throughout the importance of having an effective collaboration between different agencies. Specifically, the Hinsdale County Emergency Medical Services center with STPHD, the medical center with STPHD, and participation in weekly collaborative phone calls with agencies within and outside of Hinsdale County.
- Limited Resources
  - Numerous participants discussed the dire need for resources in local areas. Limited or urban settings, the area can lead to the geographic isolation of the county, in which the county has to procure scarce resources and face with acquiring PPE. A specific challenge for the county’s public health department was the lack of time to afford their vehicles, but if one or two vessels were unexpected to be used in a specific area, it could still mean that no one will be available to replace the PPE.
- Impact on the Town
  - When participants discussed the potential demotion to the town, an example is shown in the background. Lake City is home to a large number of residents, but the town’s population changes with the seasons; for example, when the snow melts, or rather the lack thereof, would impact the town’s businesses. Additional concerns expressed from the possibility of vision bringing the virus to Lake City and the spread of disease within the community.
- Lessons learned - Applicable to Rural Areas
  - Participants have faced many of the challenges rural areas in the COVID-19 pandemic. While this is the case, they have also found creative solutions. Some of the major themes involved with the lack of communication from public health offices.

Discussion & Conclusions

The motivation behind this study was to better understand rural communities, and Hinsdale County, Colorado in specific, responded to the COVID-19 pandemic.

• Various community stakeholders identified unique strategies, solutions, and interventions that were utilized, in addition to barriers faced.
• Our multiple interviewees also demonstrated the resilience and ingenuity of rural communities

Overall, this study demonstrated the importance of rural communities creating an interlinked network between their public health, medical, and civilian agencies in preparation for public health emergencies.

While this case study was completed in the context of a rural county, many of the lessons learned can be applied to urban counties as well.

Acknowledgements

Thank you to our participants, the town of Lake City, the Silver Thread Public Health District, the Lake City Area Medical Center, and Dr. Gina Carr. We would also like to thank our faculty advisor Dr. Mark Deutchman and the University of Colorado School of Medicine Rural Program.

*Disclosures: no conflicts of interest to disclose.

References