

# An Assessment of Farmers' Perspectives of Medical Marijuana as an Alternative Treatment for Chronic Pain: A Survey

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## BACKGROUND

- The U.S. spends over \$100 billion annually on healthcare costs related to pain management and opioid dependence [1].
- This exceeds the costs of cancer, diabetes, and heart disease combined. Chronic pain costs an estimated \$600 billion annually in lost productivity and medical treatment. Over 40,000 people die each year from opioid overdose.[1,2]
- Chronic pain is a risk factor in farming and is higher among agricultural workers than in other industries. [3]
- Many farmers suffer from chronic musculoskeletal (i.e., low back, hip, knee, neck, hand, and finger) pain conditions needing continuous medical treatment. [3,4]
- Research studies found higher drug-related deaths among rural farming communities due to misuse and a divide in access to health-related information.[1,5]
- The literature also suggests that using alternative treatments to opioids to treat chronic pain would be helpful by tailoring interventions to the need. [5]
- Given chronic illnesses' clinical and economic burden on patients and society, evaluating potential treatment options to reach the most desirable outcomes would be beneficial. Knowing individuals' views of medical marijuana as an alternative treatment for chronic pain may help policy decisions and development.
- The main aim is to assess individuals' perspectives on medical marijuana as a treatment alternative for chronic pain.

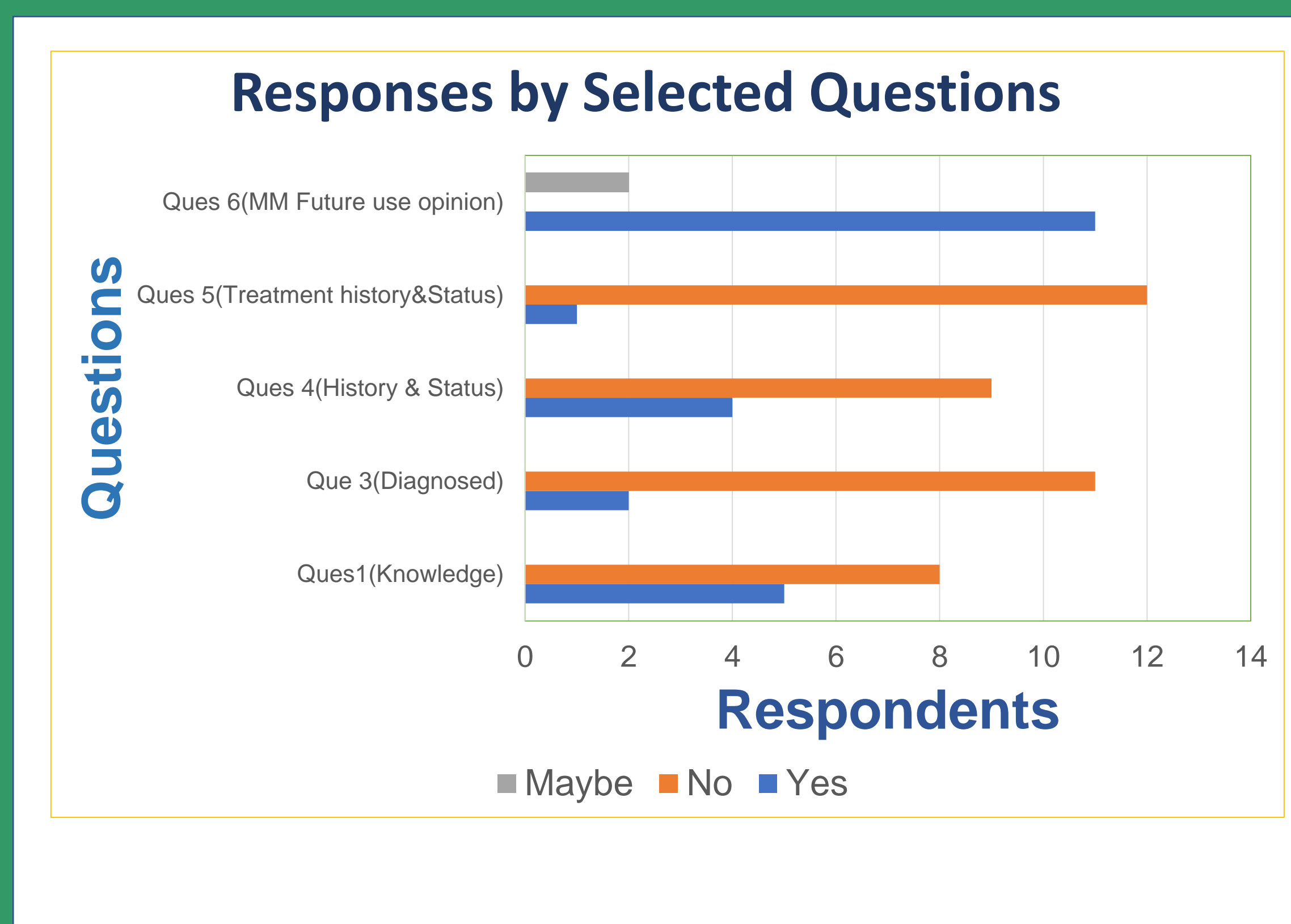
## METHODS

- We developed a survey to elicit individuals' views on the treatment modality of chronic pain conditions.
  - Provided a 16-question survey instrument
    - The first seven questions collect information about the participant's knowledge of the subject matter and source of information, disease history & status, and treatment opinion about medical marijuana as an alternative treatment.
    - The next nine questions ask about health insurance coverage, professional, demography, and socioeconomic status.
- Institutional Review Board process approval
- Pre-test the survey instrument to ensure validity
- Identified eligible individuals 18 years or older to participate in the study.
- Administered the revised survey via an electronic anonymous link to an agricultural worker/farmer database.
- We used descriptive statistics to summarize the data.
- We focused data analysis on questions one, three, four, five, and six (Table 1).

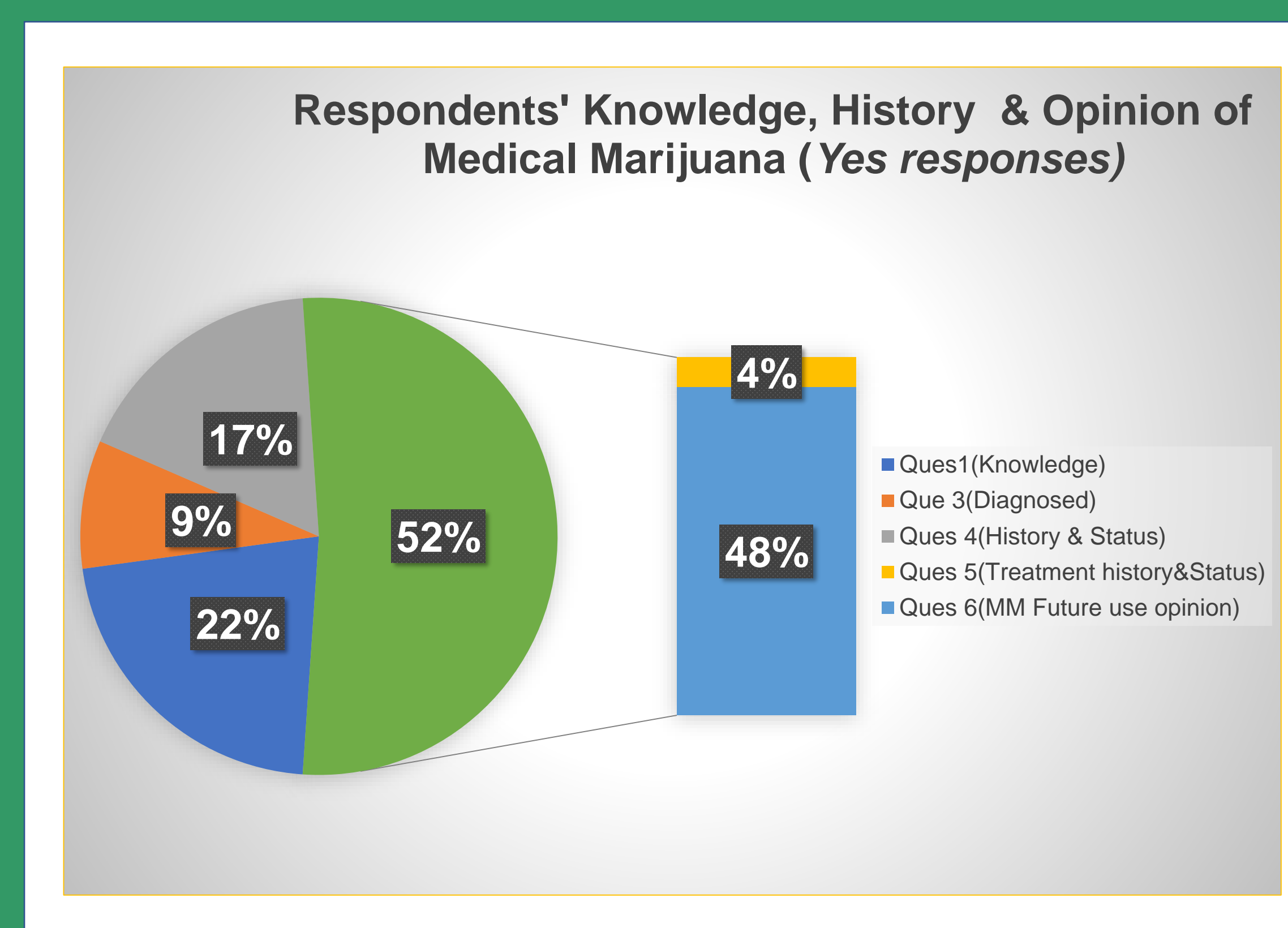
**Table 1. Survey Questions Codes and Description**

Codes	Description
Ques1(Knowledge)	Chronic pain does not go away, and it has clinical and financial burdens. Before this study, did you know about chronic pain among farmers or the farming community?
Ques 3(Diagnosed)	Have you ever been diagnosed with chronic pain?
Ques 4 (History & Status)	Are you currently or have ever been treated for chronic pain?
Ques 5 (Treatment history & Status)	Are you currently or have ever been a medical marijuana (MM) patient?
Ques 6(MM Future use opinion)	If no, would you use medical marijuana to treat a covered illness if the health authorities indicate it is safe to use and effective?

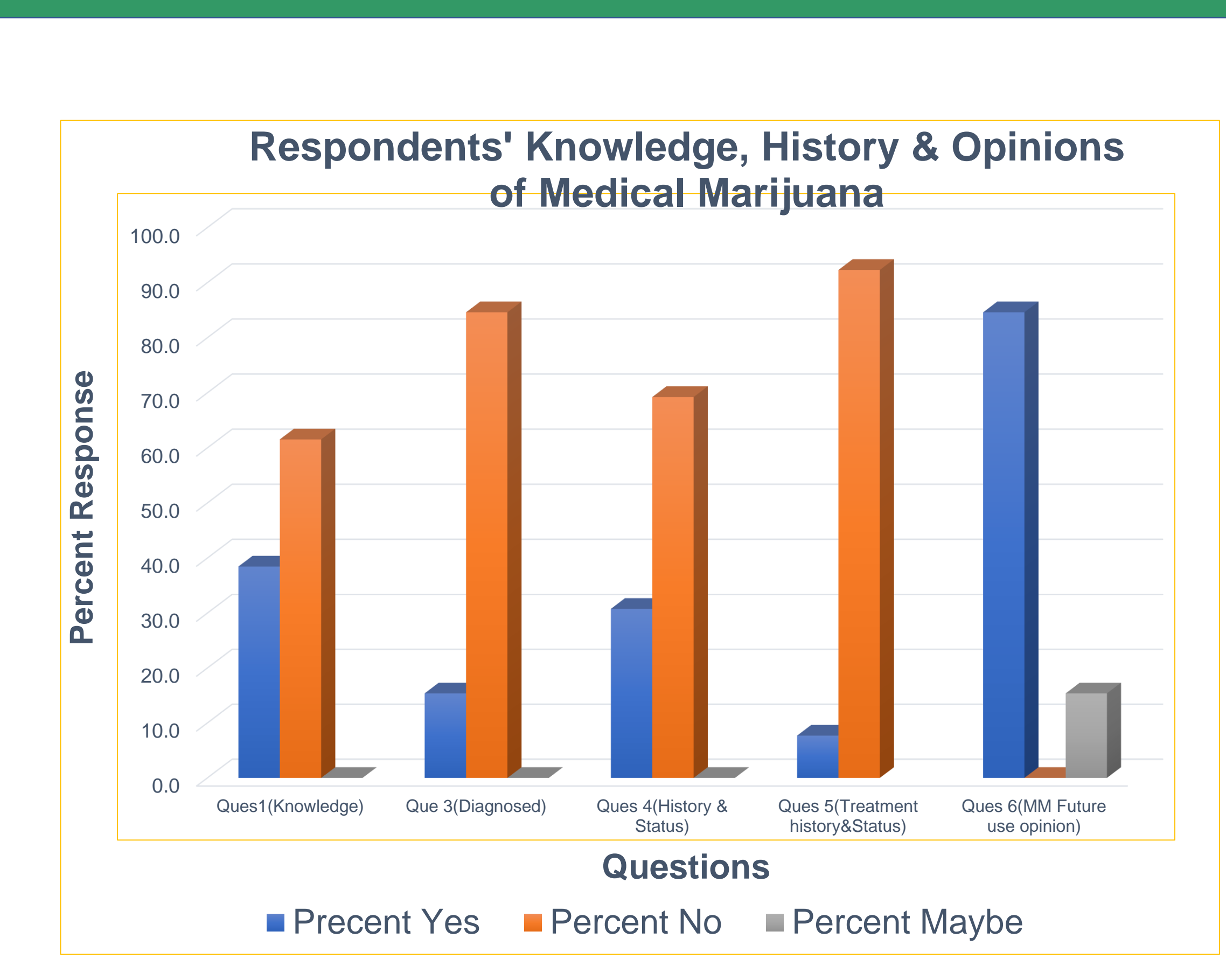
**FIGURE 1**



**FIGURE 2**



**FIGURE 3**



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## RESULTS

- The study aimed to assess individuals' perspectives about medical marijuana as a treatment alternative for chronic pain. Thirteen persons out of 60 responded to the survey with a response rate of 21.7%.
- Of those responding, 85% would use, and 25% would consider using medical marijuana to treat a covered illness if health authorities designate it as safe and effective.
- From the selected five questions, questions five and six makeup 52% of all yes responses, i.e., respondents responded favorably to using medical marijuana when considering their treatment history and status.
- Only eight percent were or have ever been medical marijuana patients.
- Sixty-nine percent of the respondents did not know of chronic pain among farmers or the farming community.

## DISCUSSIONS

- The response rate was low. Only 13 out of 60 responded to the survey, but the results are noteworthy. The majority of the respondents were blacks whom we target for programs. According to the CDC and NIDA (National Institute of Drug Abuse), blacks are more likely to die of opioid overdose, and the related deaths continue to worsen for this group, according to NIDA
- Responses from this race group can help stimulate health equity and disparity programs, and awareness.

## CONCLUSIONS

- The preliminary results suggest that farmers are willing to use medical marijuana as an alternative treatment for chronic pain.
- This outcome highlights the importance of accounting for individuals' perspectives in healthcare policy decision-making.
- Future research will reach a broader population and sampling frame.

## DISCLOSURES

- The authors declare that there is no conflict of interest.

## ACKNOWLEDGMENTS

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