



Intention to vaccinate during the “twindemic”: influenza and COVID-19 vaccine decision-making in adult residents of Pima County, AZ

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Introduction

- A surge in COVID-19 cases during the 2020 fall influenza season has been called a “twindemic.” This double pandemic threatens to overwhelm an already stretched healthcare system and add further mortality to the more than a quarter million COVID-19 deaths attributed to the pandemic.
- The USA alone already has more than 250,000 COVID-19–related deaths this year, and around 24,000 – 62,000 deaths related to influenza during the 2019-20 flu season (CDC, 2020).

Seasonal Influenza and COVID-19 are two respiratory illnesses with:

- similar clinical presentations,
- immense and growing impacts on the health of communities around the world, and
- potential to be prevented with a vaccine (Gostin & Salmon, 2020).

The Pima County Health Department (PCHD) released a survey in 2016 to identify, describe and assess vaccine hesitancy among PCHD adult clientele. A pilot study of 56 surveys were collected from English or Spanish speaking adults.

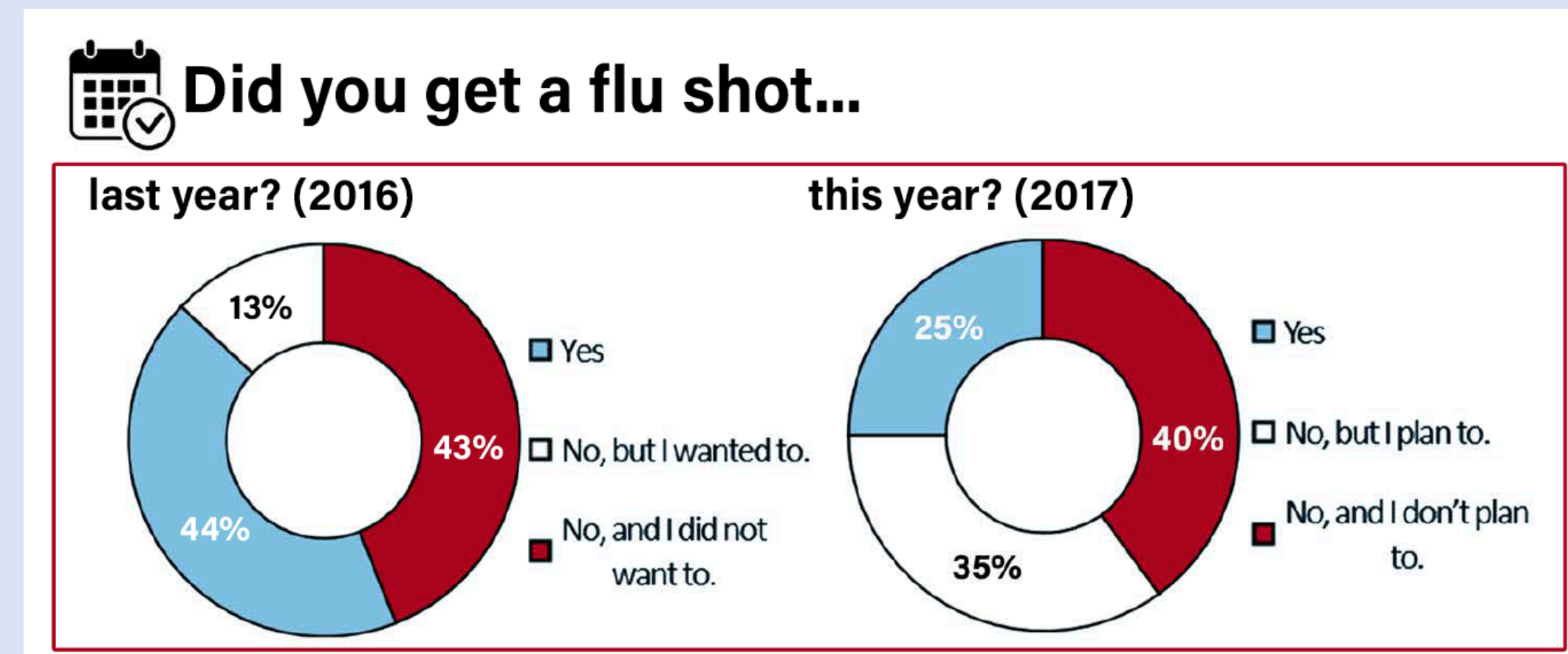
About 38% of participants were found to not want to get a seasonal influenza vaccine.

Primary reasons for wanting to receive the vaccine included:

- to avoid getting the flu (26.7%),
- their children's interest (18.3%), and
- it was required for school or work (18.3%).

Barriers to receiving the vaccination included:

- not having enough time (26.7%),
- not having insurance (17.8%), and
- not knowing where to go (15.6%).



Why couldn't you get a flu shot? [Barriers to vaccine access]

- "I did not have insurance."
- "I did not know where to go."
- "I did not have time."

Why didn't you get a flu shot? [Barriers to vaccine uptake]

- "I do not think I need it."
- "I do not believe the shot will protect me from flu."
- "I let my body handle flu naturally."

Methodology

This mixed methods study will take place in a series of 6 Phases (Fig 1). Currently the research is almost through with Phase 2: exploratory focus group discussions.

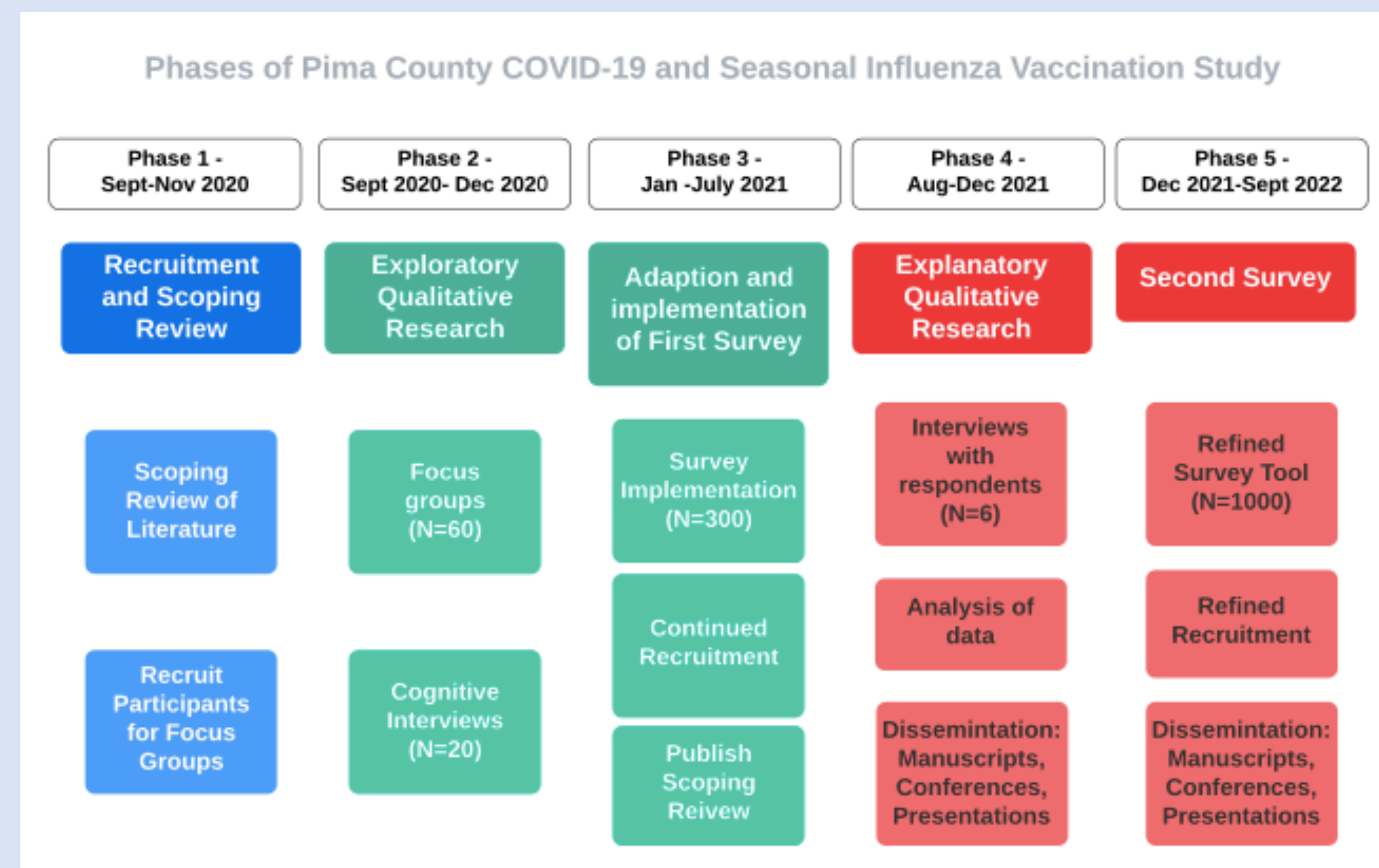


Figure 1. Phases of the COVID-19 and Seasonal Influenza Vaccination hesitancy study in Pima County.

Between September and November 2020, 11 FGDs were conducted in English and Spanish. FGDs were stratified by race/ethnicity and gender. Discussions were conducted virtually on a zoom platform, which were then transcribed and translated, if needed, from the audiovisual recordings. Scenarios were provided to prompt responses based off social scenarios (see examples below)

Henry and his family returned from vacation in Florida recently with their 8-month-old and 3-year-old sons. They transited through Phoenix International Airport where they spent three hours at a restaurant and waiting in Terminal 2. The next day, Henry sees on the news that a person with a very serious vaccine preventable disease was in Terminal 2 during the same time. A public health warning from the Maricopa Department of health announcement is carried on the local news.

Categories of questions included:

- Vaccine past behavior,
- General vaccine attitudes & knowledge,
- Information-seeking behavior,
- Beliefs about credible sources of information
- Social norms,
- Risk Perception,
- Disease Severity perception/knowledge,
- Vaccine confidence,
- Politics

Three researchers are independently coding two representative FGD transcripts in order to create the codebook for qualitative analysis using grounded theory.

The senior third researcher will resolve any disputes in the final themes identified. Coding will occur using the program Dedoose and the codes developed will be used to guide the coding and analysis of the remainder FGDs.

Results

Seven preliminary themes were identified from FGDs:

- Generally high-risk perception of COVID-19 infection;
- Perceived severity of COVID-19 illness variation by age;
- Mixed reports about influenza vaccine uptake for previous years, perhaps associated with age;
- The COVID-19 pandemic causing participants who did not usually take the flu vaccine to consider taking the flu vaccine;
- Most participants not wanting to be among the first to take a COVID-19 vaccine;
- Politicization of the vaccine production leading to a lack of trust in COVID-19 vaccines;
- Young African American men appearing to be most skeptical about COVID-19 vaccination.

Male quotes:

Perception of risk as 0 leads to not wanting vaccine

"I'm healthy. I take care of myself. I've been doing the things like coughing and all that, I've been doing that for most of my life. Most of you guys were talking about getting the flu shot. I haven't had a flu shot in 40-30 years and haven't been around people with the flu and all that. I don't get it, I can't even tell you the last time I've had a cold."

Convenience of shot

"The last several [vaccines] I've had have been like at CVS or Walgreens or [Safeway] and they have been just really super easy."

Trust of physician

"Well, I trust my doctor. So I will follow him because I've got a relationship with him. So he's knows how I think. So we'll go with that."

Fear of pain

"I don't like needles"

Low Risk Perception

"Influenza is not going to kill me"

Female quotes:

Collective responsibility

"It's my social responsibility to not be a vector"

Concerned about first vaccine produced for Covid-19:

Worried about pharmaceutical companies "cutting corners"

There may be a "profit motive"

The issue is "political"

"I want to know who have they given it to where the people of color. What age groups and what are the potential side effects"

Communication barriers

"Free flu vaccines" announcement at pharmacy, but upon arrival, they don't have

Decision-making process regarding vaccination

"I would have to look at what has been happening within my community, in within my social circle, maybe even within my church or within my my church district, I would be looking at what's going on there. But I agree with [the other participant], I have to be comfortable with and know that there were others that I trust that have been vaccinated."

Conclusions and Discussion

There is a growing need for an understanding of sociocultural and psychological factors influencing the spread and prevention of infectious diseases, especially in light of the COVID-19 pandemic (Van Bavel et al., 2020).

Findings from this qualitative analysis suggest that risk perceptions of COVID-19 may drive higher rates of influenza vaccination.

Most participants were distrusting about future COVID-19 vaccines and prefer to wait as they did not want to vaccinate immediately.

A few phases in the study remain before the study concludes:

- Scoping review,
- Pilot survey,
- Explanatory Interviews,
- Final survey,
- Dissemination of information

A survey will be adapted for PCHD based in the qualitative data gathered from FGDs. The survey will be continually adapted and administered annually by PCHD to determine changes in the community attitudes regarding intention to use the seasonal influenza and potential future COVID-19 vaccines. The analysis of the survey results will ultimately provide recommendations for future health interventions for the promotion of vaccination.

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