



RESEARCH ARTICLE

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Addressing the AAPI COVID-19 Health Effects in Pima County

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ABSTRACT

Background: COVID-19 had significant physical, mental, and social health impacts on the Asian Americans and Pacific Islander (AAPI) populations in Pima County, Arizona, USA. The *Together We Thrive* project established specific activities to address the three health areas impacted by COVID-19: vaccination clinics to reduce severe cases, social health classes to reduce social isolation, and mental health panel presentations to reduce anxiety/depression/stress associated with the virus. The activities that address each of the three health areas were evaluated for their impact.

Methods: This was a cross-sectional study (program evaluation). The number of vaccines given at the clinics were recorded. For social health classes and mental health panel presentations, evaluation forms collected information on knowledge gain, usefulness of knowledge gain, and impact.

Results: Sixty-five individuals got vaccinated. Most of the 19 social health class attendees gained new knowledge. Seventy-two percent planned to expand their social network. Most of the nine who attended the mental health panel presentations gained new useful knowledge, were better able to cope with the mental health effects associated with COVID-19, and planned to practice the coping exercises learned.

Conclusion: Ninety-three individuals had benefitted from the three TWT activities offered. Outreaching to AAPI populations and the changing COVID -19 needs required innovative health education and promotion approaches.

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Introduction

This is the fourth year of the COVID-19 (severe acute respiratory syndrome coronavirus 2 - SARS-CoV-2). It is a respiratory disease (attacks primarily the lungs) that spreads from person to person through respiratory droplets (coughs, sneezes, and talks), and contaminated surfaces and objects. The virus has significant physical, mental, and social health impacts on the Asian Americans and Pacific Islander (AAPI) populations in Pima County [1].

Pima County is the second most populated county (1,057,597 in 2022) [2] and the second highest AAPI populated county in Arizona. The county is in the southern part of the state. It covers 9,184 square miles which is larger than the state of New Jersey (8,723 square miles) [3,4]. The Arizona Department of Health Services reports there were 331,370 county COVID-19 total cases and 4,401 total deaths on October 4, 2023 [5].

The U.S. Census 2020 reported the Pima County AAPI population was 47,944 (for race alone and combination) [6]. In

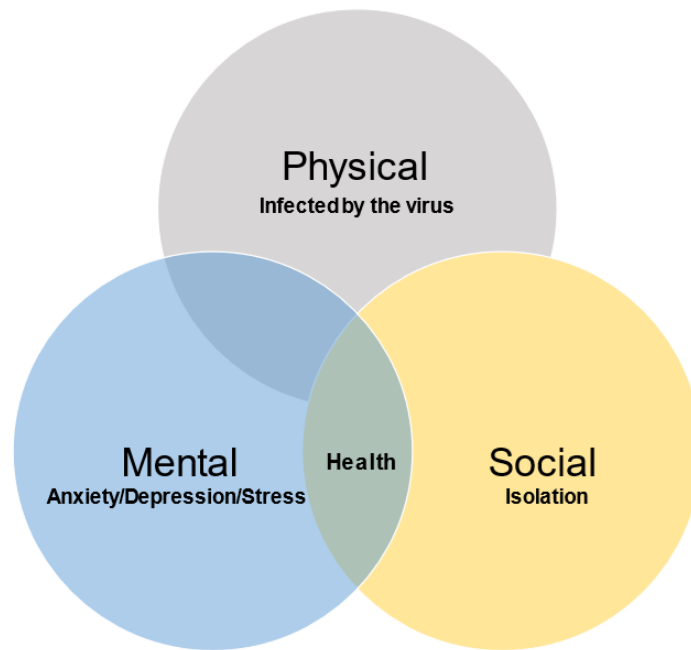
2022, three and seven tenths percent of the county residents were Asian Americans and Pacific Islanders (race alone) [2]. The top six Asian American ethnic populations (race alone) in Pima County were: (1) Chinese – 8,119, (2) Filipino – 5,697, (3) Asian Indian – 4,066, (4) Vietnamese – 3,862, (5) Korean – 2,735, and (6) Japanese – 1,427 in 2020 [6]. The top three Pacific Islander populations (race alone) were (1) Native Hawaiian – 489, (2) Chamorro – 269, and (3) Samoan – 220 [6].

The purpose of the Tucson Chinese Cultural Center *Together We Thrive* (TWT) project is to increase the capability of the AAPI communities to deal with coronavirus and other respiratory infections. The project is funded by the Pima County Health Department (October 1, 2022 to January 31, 2024). The TWT addressed the three areas of health impacted by COVID-19: (1) the physical – being infected by the virus, (2) the mental – uncertainty and lacking control of the situation that leads to anxiety, depression, and stress, and (3) the social – being isolated from people (Figure 1).

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Figure 1: Three Areas of Health Impacted by COVID-19.



There are many challenges in implementing the project. The AAPI populations are small in numbers, reside throughout the county, and difficult to reach. There are language, cultural, and health belief and practice barriers. Mental health is not a topic that many AAPIs want to discuss or hear about. It is still a taboo subject. These populations do not easily open themselves to outsiders and are reluctant to participate in health promotional programs.

Since the project occurs in the fourth quarter of the third year of the COVID-19 pandemic and the coronavirus cases are lower than the year before, many AAPIs believe the pandemic is over and lack of interest in attending COVID-19 activities/events. There are a significant number of the population who are experiencing COVID-19 fatigue. The World Health Organization declares the COVID-19 global public health emergency was over on May 5, 2023. Shortly after, the Biden Administration declares the COVID-19 public health emergency was over in the United States on May 11, 2023. Both declarations reinforce the perception that the pandemic is over. There are more COVID-19 vaccination hesitation in years 3 and 4 than in year 2. The vaccination rates have declined as well as interest in getting the COVID-19 boosters [1].

The TWT project established specific activities to address the three health areas impacted by COVID-19: vaccination clinics to reduce severe cases, social health classes to reduce social isolation, and mental health panel presentations to reduce anxiety/depression/stress associated with the virus.

Methods

The activities that address each of the three health areas impacted by COVID-19 were evaluated for their impact.

Vaccination Clinics

Three COVID-19 and flu vaccination clinics were offered. The Pima County Health Department (PCHD) gave the vaccinations.

To attract unvaccinated AAPIs and those who needed a booster vaccine to the vaccination clinics, the first two clinics were held in conjunction with other events. The first clinic was at the Pan Asian Community Alliance (PACA) in which free food bags were given out on November 19, 2022. The second clinic was held at the Tucson Chinese Cultural Center (TCCC) during the Asian Holiday Party on December 3, 2022. The last clinic was at the TCCC as a stand-alone event on January 28, 2023. At each of the clinics, there was a COVID-19 information table, the TWT team were available to answer questions about the virus, and multi-language COVID-19 handouts were provided. The PCHD gave out COVID-19 test kits.

Social Health Classes

Three social health and media/internet classes were given (August 26 at TCCC, September 16 at PACA, and September 30, 2023 at TCCC). The topics covered in the *“Improving Social Health Using Social Media and Internet”* class were: what is social health, benefits of good social health, social networks, ways to maintain your social network, social media introduction, and discussion on how to sign up for three social media platforms. Social media technical assistance was provided to the attendees. COVID-19 information, a list of vaccination clinics, and test kits were given out to attendees.

Mental Health Panels

There were two panel presentations on *“Coping with Mental Health Effects of COVID-19”* given by three AAPI mental health experts on October 7 and 21, 2023 at the TCCC. The topics covered included: what are the mental health effects associated with COVID-19, how can you recognize these effects, who are most impacted by the mental health effects, how can you cope (address) with these effects, how can you build up your capabilities to deal with these effects, and where can you get help in dealing with mental health effects. The session was divided into three parts: the formal presentation, question-

and-answer session, and audience participating in the coping exercise session. COVID-19 information, a list of vaccination clinics, test kits were given out to attendees.

This was a cross-sectional study (program evaluation). The number of vaccines given at the clinics were recorded. For social health classes and mental health panel presentations, evaluation forms collected information on knowledge gain, usefulness of the knowledge gain, and impact. The social health evaluation form comprised of 14 questions and the mental health evaluation form had 9 questions.

There were several limitations to the evaluation. Not all the attendees turned in their evaluation forms. Some attendees did not answer all the evaluation questions. The responses were either “yes” or “no.” There was no attempt to determine the amount of knowledge gained.

Results

Vaccination Clinics

Of the 282 attendees who attended the clinic/event, 65 received either a COVID-19 or a flu vaccine. Table 1 summarizes the three clinics’ activities.

Table 1: Together We Thrive Three Vaccination Clinics’ Activities.

Clinic	Location	Date	Attendance#	COVID-19#	Flu#	Total#
1	PACA	11-19-22	114	23	9	32
2	TCCC	12-03-22	150	14	3	17
3	TCCC	01-28-23	18	8	8	16
Total			282	45	20	65

Social Health Classes

Of the 19 attendees, 18 completed the survey. This was the race/ethnicity breakdown: Chinese (12), Korean (1), Marshallese (3) and Non-AAPI (2). There were 8 males and 9 females who attended. This was the age groups breakdown: 11 were 70 years and older, 5 were 60-69, 1 was 40-49, and 1 was 30-39. Fourteen had a bachelor or higher degree and 4 were either high school graduate or had some college education. All the attendees used computer, cell phone, and the internet. Eighty-three percent used social media.

Table 2 summarizes the knowledge gains. More than 83 percent of the attendees indicated they gain knowledge in all five topics covered.

Table 2: TWT Social Health and Media/Internet Class Knowledge Gain Summary.

The class increased my knowledge about: N = 18	Yes %	No %	DNA %
What is social health?	88.9	0.0	11.1
Benefits of good social health.	88.9	0.0	11.1
Different types of social networks.	88.9	5.5	5.5
Ways to maintain your social networks.	83.3	5.5	11.1
How to set up a social media platform and network.	88.9	5.5	5.5

DNA: Did Not Answer

The most useful knowledge gain was the different types of social networks (88.9%). This was followed by what is social health (83.3%) and the benefits of social health (83.3%). The usefulness of the knowledge gain is summarized in Table 3.

Table 3: Usefulness of TWT Social Health and Media/Internet Class Knowledge Gained.

The class increased my knowledge about: N = 18	Yes %	No %	DNA %
What is social health?	83.3	0.0	16.7
Benefits of good social health.	83.3	0.0	16.7
Different types of social networks.	88.9	0.0	11.1
Ways to maintain your social networks.	77.8	5.5	16.7
How to set up a social media platform and network.	72.2	16.7	11.1

DNA: Did Not Answer

Table 4 summarizes the impact on attendees. Ninety-four percent of the attendees indicated that the class encourage them to expand their social network. Seventy-two percent planned to expand their social network. Since 83 percent of the attendees already used social media, only 33.3 percent planned to enroll in a new social media platform.

Table 4: TWT Social Health and Media/Internet Class Impact.

Question N = 18	Yes %	No %	DNA %
The class encourage me to expand my social network.	94.4	5.6	0.0
I will expand my social network.	72.2	16.7	11.1
I will enroll in a new social media platform.	33.3	38.9	27.8

DNA: Did Not Answer

Mental Health Panels

Of the 9 attendees, 6 completed the survey. All the attendees were Chinese. There were 5 females and 1 male attendees. Five were 70 years and older, and 1 was 60-69. Five attendees had a bachelor or higher degree and 1 had an AA degree.

Those who answered the questions indicated they had gained knowledge in all six topics and the knowledge gained were useful (Tables 5 and 6).

Table 5: TWT Mental Health and COVID-19 Panel Knowledge Gain Summary.

The class increased my knowledge about: N = 6	Yes %	No %	DNA %
What are the mental health effects of COVID-19?	100.0	0.0	0.0
Who are most impacted by mental health effects?	83.3	0.0	16.7
How to recognize the mental health effects?	83.3	0.0	16.7
How to cope with these effects?	83.3	0.0	16.7
How to build up your capability to cope with these effects?	83.3	0.0	16.7
Where can you get help to deal with these effects?	83.3	0.0	16.7

DNA: Did Not Answer

Table 6: Usefulness of TWT Mental Health and Panel Class Knowledge Gained.

The class increased my knowledge about: N = 6	Yes %	No %	DNA %
What are the mental health effects of COVID-19?	83.3	0.0	16.7
Who are most impacted by mental health effects?	83.3	0.0	16.7
How to recognize the mental health effects?	83.3	0.0	16.7
How to cope with these effects?	83.3	0.0	16.7
How to build up your capability to cope with these effects?	83.3	0.0	16.7
Where can you get help to deal with these effects?	83.3	0.0	16.7

DNA: Did Not Answer

All six attendees who completed the surveys indicated that the presentation help them cope with the mental health effects associated with COVID-19 and planned to practice the coping exercises learned (see Table 7).

Table 7: TWT Mental Health and COVID-19 Panel Impact.

Question N = 6	Yes %	No %	DNA %
The <i>presentation</i> help me to cope with the mental health effects associated with COVID-19.	100.0	0.0	0.0
I will practice the coping exercises learned.	100.0	0.0	0.0

DNA: Did Not Answer

Discussion

The World Health Organization definition of “health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” During the COVID-19 pandemic, the primary focus was physical health -- prevent getting the virus and treat those who have the virus. The mental and social health effects associated with the virus were given low priority. The TWT project addressed all three areas of health. Many AAPIs were still impacted by the mental and social health effects in the fourth year of COVID-19.

To address the three aspects of health were not easy. There were many obstacles encountered in the project. COVID-19 vaccination hesitation grew in years 3 and 4 as well as declines in interest in getting COVID-19 boosters. The vaccination clinics were offered during November 2022 - January 2023. The clinics were held in conjunction with other events that attracted people to the clinics. Sixty-five individuals got vaccinated.

Three social health classes were offered (August – September 2023). Many felt the COVID-19 pandemic was over since case numbers were low throughout the spring and summer. During the past three summers, there were case surges, but summer in year 4 there was no surge. There were a significant number of the AAPI population who were experiencing COVID-19 fatigue and lack of interest in participating COVID-19 activities/events. There were 19 class participants. Most of the attendees

gained new knowledge. The most useful knowledge gain was the different types of social networks, what is social health and the benefits of social health. Seventy-two percent planned to expand their social network.

The mental health panel presentations were offered twice in October 2023. The same challenges that occurred in the social health classes also occurred in the mental health presentations. In addition, mental health was not a topic that many AAPIs wanted to discuss or hear about. It was still a taboo subject. Nine attended the presentations. Most of those who attended gained new useful knowledge, were better able to cope with the mental health effects associated with COVID-19, and planned to practice the coping exercises learned.

Even with the AAPI leaders’ assistance in promoting the TWT activities/events as well as using different forms of media (e.g., newsletters, activity/event flyers, public announcements, social media) to get the word out about the clinics, classes, and presentations, they were not enough to overcome the many of the obstacles.

The timeliness in implementing the TWT project was not ideal. The TWT activities/events offered during the time when there were low COVID-19 cases. If the project activities were implemented a year earlier when there were high case numbers and more concerns about COVID-19, there may be higher participation numbers?

Conclusion

Even with the low number of participants, 93 individuals had benefitted from the three TWT activities offered. Addressing the physical, social, and mental health effects of COVID-19 should not be abandoned because of low participation numbers. COVID-19 still exist. Many have long COVID-19 physical, mental, and social health effects. Outreaching to AAPI populations and the changing COVID-19 needs required innovative health education and promotion approaches.

Funding

Pima County Health Department.

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