Brushstrokes of Resilience: Evaluating the Effectiveness of Murals for Communicating COVID-19 Health Information to Urban Poor Communities

Dishha Medhavi*
PhD Scholar, University School of Mass Communication,
Guru Gobind Singh Indraprastha University, New Delhi, India
Dishha Medhavi ORCiD- https://orcid.org/0000-0002-7075-4444
Email Address: dishhamedhavi@gmail.com, Mobile No. +91-9560432606

Dr Kulveen Trehan
Assistant Professor & PhD Programme coordinator,
University School of Mass Communication,
Guru Gobind Singh Indraprastha University, New Delhi, India
Kulveen Trehan ORCiD- https://orcid.org/0000-0001-5979-1941

Abstract

The research investigates how murals served as an effective communication tool for the urban poor population of New Delhi and explores the response of the intended community to mural paintings regarding awareness, attitudes, informed decision-making, and pandemic-induced conduct. The COVID-19 pandemic had a severe impact on the impoverished urban inhabitants, who were deprived of finances for electricity, the internet, and devices and were also left out of the digital sphere. Recognizing this digital disparity, various volunteer networks of young people initiated COVID-19 messaging through mural artworks.

Grounded in the culture-centred approach (CCA), which posits that, when fostered locally, communities are their own best problem-solvers (Dutta, 2007). This looks at how structure, culture, and agency work together to create transformative practices that challenge marginalizing methods of communication in healthcare settings. The research design employed in this study is a mixed-methods approach, incorporating semi-structured interviews with artists and volunteers involved in the creation of COVID-19 murals as well as a Pen and Paper Survey (PAPI) administered to the urban poor population of New Delhi who were exposed to these murals. According to the research, local artists and volunteers effectively disseminated information about COVID-19 to the underprivileged urban population. The outcomes of this investigation lend credence to the notion that murals tailored to the demographic and psychographic characteristics of the target audience can serve as a valuable tool for improving health literacy as well as affecting behaviour in marginalized communities. Moreover, the creation of artwork for a specific audience is a collaborative effort that involves both local artists and recruited volunteers who are residents of the same community. The involvement of students from educational institutions in this initiative enhances the comprehension of issues in the region by organizing street art competitions on the premises of schools.

Keywords: mural, urban poor, culture-centred approach, health communication, COVID-19

Introduction

In the capital city of India, New Delhi, COVID-19 caused distress and loss to migrant workers, daily wage workers, the homeless, and slum dwellers in particular. The lack of access to healthcare facilities and basic amenities worsened their already dire situation. Many were forced to walk hundreds of miles back to their hometowns due to the sudden loss of income. Without adequate finances for electricity, internet connection, and required devices, the urban poor were also left out of the digital ecosystem during COVID-19. This has further widened the digital divide and hindered their access to education, healthcare, and other essential services. The urban population in India doubled, and the urban poor constitute 30% of all the poor in the country (Census 2021). Among Indian states, New Delhi has the highest share of inter-state migrants, an indicator of the attraction it holds for outsiders (Health Care Equity in Urban India, Report, Azim Premji

University, 2021). Considering the nature of the urban poor, who possess certain similarities to the rural sect in terms of literacy, there is a need to revise communication strategies for enhanced addressability. The characteristics of the urban poor should not be equated with those of the urban population; they require community-level interventions, engagement through a network of volunteers, peer leaders who are intimately familiar with local concerns and have the trust of the communities they serve, and the recruitment of more frontline workers who build literacy toward immediate goals and find ways to provide information in digitally deprived areas. The pandemic has highlighted the need for better social safety nets and infrastructure for vulnerable communities in India.

Seeing the digital disparity in access to information, a network of youth volunteers, Nehru Yuva Kendra Sangathan (NYKS)[1], under the Ministry of Youth Affairs and Sports (Govt. of India), with a network of 8.5 million youth (NYKS, 2020), initiated communication on COVID-19 through street art and wall paintings. Their aim was to spread awareness and educate people who may or may not have access to digital platforms. This initiative has been successful in reaching a large number of people and has helped control the spread of the virus in remote areas. As a symbol of the fight against coronavirus to construct the city's history as a reminder of its resiliency, various mediums, techniques, and styles from the modernist and postmodernist repertoire were utilized in their street art as catchy slogans, vibrant illustrations or visuals, etc.

This research gives us a way to look at how people interact with their environment by analyzing the physical and social effects of authorized street art interventions on the urban poor population of New Delhi, the capital city of India. In this study, the term "street art" is used as an organizing principle and to describe a certain type of artistic expression, but the primary focus will be on deciphering the meanings of murals. The study is based on a

culture-centred approach (CAA), which posits that, when fostered locally, communities are their own best problem-solvers (Dutta, 2007). The main objective of the study is neither to discuss the controversy nor the contextual statements of street art but to examine how urban poor communities responded to the COVID-19 pandemic murals in terms of awareness, attitude, informed choices, and altered practices. Further, the study will determine if street art can be an effective communication tool in low- or middle-income countries, specifically for the population facing the digital divide. This will enable us to comprehend integrated communication strategies that make use of traditional media platforms that can be used by underdeveloped digital communities.

Street art
Public urban spaces exhibit cultural practices and social interactions; one example of such artistic communication is the street art that populates the walls of rural and urban cities in any country. Numerous names, labels, and terms have been used to refer to street art, which consists primarily of graffiti, murals, stencils, stickers, 3D chalk art, mosaics, rollers, wheat-paste posters, etc. (Patel & Sharma, 2021; Bhasin, 2018). Street art is a form of expression and communication that encompasses a wide range of techniques, styles, subjects, and forms (Frederick, 2009). The presence of art functions as a depth gauge because it establishes a connection between the human subject's "being in the world" and his perceptual experience of spatiality (Horrigan-Kelly et al., 2016). This connection is important because it allows individuals to have a more meaningful and embodied experience of their surroundings.

Additionally, art on walls can also serve as a form of cultural expression and convey important messages about social issues. It is a visual cultural production whose boundaries have expanded into the streets, and the surfaces of the city have become the new canvases for its practitioners (Austin, 2010). This has led to the emergence of street art as a powerful medium for political and social commentary, challenging traditional notions of art and its role in society. The historical context of street art in India is also an important factor. Contemporary artists have reinterpreted and transformed traditional Indian art forms such as rangoli, wall paintings, and folk art to create street art. This combination of traditional and contemporary influences

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[1] Nehru Yuva Kendra Sangathan (NYKS) is a government-run youth organization in India that forms village-level youth clubs to engage youth in nation-building. Through its extensive network of youth clubs and programs, it empowers youth to contribute through social, cultural, and community development activities.

contributes to the originality and diversity of street art in India (Bhasin, 2018). In addition, the literature emphasizes the role of street art as a catalyst for urban revitalization, revitalizing blighted areas, and fostering a sense of community pride ("Street Art: An Artistic Message in the Modern Urban Environment," 2020). Street art, from graffiti to murals, has the ability to transform public spaces into dynamic and thought-provoking environments that engage and inspire viewers.

Street art as a medium of protest
Street art has long served as a powerful medium of protest, allowing individuals and communities to express their grievances and challenge the status quo in a visually striking and accessible way (Smith et al., 2017; Brown & David, 2018; Hawley, 2015; Alexandrakis, 2016; Lehec, 2016; Nwoye, 1993). Murals may be the most democratic form of art that has ever been produced. Murals giving voice to ordinary people's concerns are not "fine art", but art that is accessible to all, that responds to current or historical events or experiences, and that expresses deeply felt aspirations or visions for the future (Conrad, 1995). It provides a platform for marginalized voices to be heard and empowers artists to communicate their messages directly to the public, bypassing traditional gatekeepers. However, it's important to note that the use of street art as a form of protest can be contentious, as it often operates in a legal gray area. While some view it as an act of creative resistance and social commentary, others perceive it as vandalism or defacement of public property. Nowadays, educational and understated street art is more prevalent than content focused on protest or any kind of revolution.

Street art for health communication
 In recent years, political and protest-related messages conveyed through street art have given way to health-related messages. Despite this shift, very little research has been done regarding the use of street art for the purpose of communicating health information (McEwan et al., 2022). Emerging global health challenges, such as the COVID-19 pandemic, are primarily responsible for this transformation. Street artists, who are renowned for their ability to engage and captivate audiences in public spaces, have recognized the potential of their art to disseminate vital information and raise public health awareness (Bloch, 2020). Walls and urban surfaces have evolved into canvases for communicating messages about social distance, hand hygiene, mask-wearing, and vaccination campaigns (Primrose, 2021). This shift demonstrates the adaptability of street art as a medium for health communication, as it responds to the urgent needs of communities and addresses public health issues in a visually compelling and approachable manner.

Culture-centred approach (CAA)
This approach looks at how structure, culture, and agency work together to make transformative practices that challenge marginalizing methods of communication in healthcare settings. The goals of this approach are to understand (a) where communication fits into the complex relationship between structure and culture; (b) how individual and collective agency works within and against structural constraints; and (c) how human agency and communicative processes work together to bring about social change and structural transformation (Dutta, 2007). These research interests point to theoretical insights about how communication structures, practices, and messages contribute to the marginalization of certain parts of the population and bring attention to the ways in which people who are usually left out of society fight back against structures that try to silence them (Dutta, 2007). In the end, these theoretical starting points provide practical guidelines for dealing with problems of marginalization and disenfranchisement. They create spaces where people can speak out who have previously had their voices silenced by various issues that occurred. The focus is on working with subaltern communities through participatory communication strategies to co-create spaces for change that are based on theory (Dutta, 2007).

Research Objectives:
Street art has its own history of subject matter, which includes everything from historical events and social issues to protests and revolutions (Smith et al., 2017; Brown & David, 2018; Hawley, 2015; Alexandrakis, 2016; Lehec, 2016; Nwoye, 1993). Despite the prevalence of murals depicting health-related themes such as HIV/AIDS and family planning in both urban and rural areas of India, there is limited research on the effectiveness of street art for communicating information related to health. People who do not have access to the mainstream media tend to choose and take advantage of the media in the surrounding public space (Gushendra, 2015). Given the

prevalence of health-related murals in India and considering the recency of global health crises such as COVID-19, it is important to conduct further research about the potential of street art as a tool for promoting public health for the urban poor population, who are digitally underprivileged. Consequently, the following research objective emerges:

Ob1. To evaluate street art as a tool of communication for the urban poor in New Delhi.

NYKS youth volunteers group created COVID-19 murals and other activities to raise safety awareness. The murals creatively conveyed messages about social distance, masks, and hand hygiene. The organization channels youth into the process of nation-building. A variety of community-based programs support the objectives of NYKS. The murals produced by this volunteer group around various streets in New Delhi led us to frame our second objective:
Ob2. To understand how the target community responded to the murals created by NYKS in terms of awareness, attitude, informed choices, and changed practices towards pandemic COVID-19.

Methods and Materials:
Research Design
This research uses a mixed-methods design, which involves **1. Survey** of the urban poor population, and **2. Semi-structured interviews** with NYKS officials and volunteers. The data collection tool, consisting of a questionnaire and interview schedule, was developed based on the themes identified from semiotic analysis. The study is based on a culture-centred approach (CAA), which posits that, when fostered locally, communities are their own best problem-solvers. This approach acknowledges the unique cultural values, beliefs, and practices of a community and seeks to empower them to address their own health issues (Dutta, 2007). In this study, the murals that were produced by the NYKS volunteer group for the community are analyzed, and the study also analyzes how the community responded to the communication that was being conveyed through the murals.

First stage involved survey with a sample of 204 urban poor people from the eastern part of New Delhi, such as J.J. Colony and Gokal Puri, who were administered the questionnaire for understanding their response towards the murals created by NYKS volunteer group in

terms of awareness, attitude, informed choices, and changed practices towards pandemic COVID-19. The digital divide was the primary consideration in selecting PAPI surveys as the research method. Because there was a very high level of unpredictability regarding whether or not an online survey would reach the urban poor, personal interaction was required. Surveys conducted for the quantitative approach included structured closed-ended multiple choice questions to understand the demographics of the respondents and Likert-scaled statements to gauge the respondents' opinions on the research objective, along with open-ended questions for further investigation, which are about the physical and social effects of the commissioned street art productions for communicating about health. At the end the data was analysed using various statistical tests to answer the objectives.

In the second stage, a total of ten NYKS officials and volunteers who were selected, participated in semi-structured interviews. The semi-structured interviews were conducted without the use of a formal questionnaire but rather with the aid of an interview schedule containing a relevant set of questions. The semi-structured interview schedule allowed for greater flexibility in capturing the perspectives of NYKS officials and volunteers by facilitating an organic flow of the interview's progression (Bryman & Burgess, 1994). Later, the collected data was transcribed and translated from Hindi to English and analyzed by the method of thematic analysis by Braun & Clarke.

At the end of the data analysis, the findings from each method are triangulated, and conclusions are drawn from each method to provide a comprehensive understanding of the research topic. The triangulation of findings from all three methods allowed for a more robust analysis and greater validity in the conclusions drawn (Creswell & Clark, 2020).

Sampling:
For surveying, the sample was randomly recruited for the pen and paper survey (PAPI) from the low-income areas of the city. These are the areas where, according to the socio-economic classification of the state, the majority of the urban poor population of New Delhi resides. Without keeping demographic quotas, 204 individuals were surveyed in total.

The last phase was interviewing the NYKS officials and volunteers, who were contacted

based on the information gathered from the mural archives. The team that was responsible for the planning and execution of COVID-19 murals in the target area was interviewed. A total of ten interviews with a semi-structured format were carried out, four of which were conducted with officials from NYKS who were responsible for the planning and execution of the murals, and the remaining six interviews were conducted with volunteers who painted the murals and carried out the communication.

Results

Survey- Urban poor population

The sample for the pen and paper survey (PAPI) was selected using random sampling from the city's low-income neighbourhoods. The majority of New Delhi's urban poor population is concentrated in these areas, per the state's socio-economic classification. 204 people were surveyed in total, without keeping demographic quotas. Given that the intended respondent pool consists largely of those with limited education, the survey is translated into Hindi to ensure that everyone can understand it. The questionnaire is mainly divided into three parts. The demographic profile is defined in the first part with structured, closed-ended single-choice questions according to their demographic characteristics (such as gender, age group, level of education, marital status, etc.). The attitude and opinion of the respondents about the COVID-19 murals are revealed in the second part through structured, closed-ended single choice statements and scale-based questions. Considering the nature of the survey, which is a pen and paper personal interview (PAPI), the final section includes a number of open-ended questions that give the respondent the opportunity to discuss the topic in a more succinct manner by creating a personal interaction with the surveyor.

Demographic profiling

In the first phase of the survey, the respondents were asked questions with a single correct response regarding their gender, age group, level of education, working status, marital status, and the number of family members living in a single household (Table 2). The purpose of this stage was to compile a demographic profile of the respondents. There are more women than there are men, and women make up 54.4% of the sample population. 24.5% of the population is between the ages of 19 and 24 years old. The majority of the population does not even have a secondary

education, and only about 18.6% of the participants have completed their education beyond the level of high school. 33.8% of respondents are part of a family consisting of five people.

Table 2. Descriptive statistics of independent variables

Variables	N	%	Mean	SD
Gender				
Male	93	45.6		
Female	111	54.4		
Total	**204**	**100**	**1.54**	**0.49**
Age Groups				
Less than 18	32	15.7		
19-24	50	24.5		
25-34	40	19.6		
35-44	33	16.2		
45-54	23	11.3		
55 above	26	12.7		
Total	**204**	**100**	**3.21**	**1.61**
Education				
Didn't go to school	42	20.6		
Below class 10th	50	24.5		
Up to class 10th	35	17.2		
Up to class 12th	33	16.2		
Graduate	38	18.6		
Post Graduate	6	2.9		
Total	**204**	**100**	**2.97**	**1.50**
Working status				
Student	62	30.4		
Unemployed	49	24.0		
Looking for work	16	7.8		
Working part-time	17	8.3		
Working full time	48	23.5		
Disabled	2	1.0		
Retired	10	4.9		
Total	**204**	**100**	**2.93**	**1.83**
Marital Status				
Married	111	54.4		
Single	74	36.3		
Divorced	4	2.0		
Prefer not to say	15	7.4		
Total	**204**	**100**	**1.62**	**0.84**
Family Members				
One	2	1.0		
Two	4	2.0		
Three	21	10.3		
Four	57	27.9		
Five	69	33.8		
Six	29	14.2		
More than six	22	10.8		
Total	**204**	**100**	**4.77**	**1.27**
Devices owned				
TV	161	36.6	0.80	0.41
Telephone	65	14.8	0.32	0.47
Smartphone	177	40.2	0.87	0.34
Laptop	28	6.4	0.14	0.34
Desktop	9	2.0	0.04	0.21

Devices owned and Media used during the pandemic COVID-19

According to the data that was gathered, 40% of the sample owns a smartphone, and 36% of them have a television in their homes (Table 2). While investigating the questions that were asked, the responses that were recorded mentioned that it was not necessary that the devices be in good working condition. This gives the data an additional dimension. Either the smartphone does not have an internet connection, the television only receives channels that are free of charge, or it is simply not being used in order to reduce the monthly cost of the electricity bill.

Television (89.2%) was the respondents' main source of information during the COVID-19 pandemic, followed by the Internet and newspapers. Again, while probing during the survey, we found out that the time when these people were using the media was also when they were at work. They watched television while working in places like shops and factories. Similarly, they read newspapers while sitting in places like tobacco shops or newspaper stands.

Unaided & Aided awareness

When we asked the respondents whether or not they had seen the COVID-19 related murals by the NYKS, a total of 73% of the respondents were able to recall seeing them before. After that, we presented the respondents with a stimulus (an image) of murals, keeping in mind the randomization, and it turned out that aided awareness was 100%. The majority of them have seen the murals that are painted on the walls of schools, followed by the walls of government offices, public buildings, and areas near bus stops.

Overall Likeability and Attitude

The overall likeability of the murals' top two box scores (strongly agree + somewhat agree) comes to 77%; those who strongly agree make up 62.7% of the total, and those who somewhat agree make up 14.2% of the total. This demonstrates that people living in urban poverty find the murals helpful (Figure 2).

A series of statements about attitudes toward the murals were asked. A 5-point Likert scale (5 = strongly agree) was used to determine their views and opinions regarding murals.

[Figure 3 near here]. *Attitude mapping*

The statements analyzed (Figure 3) about attitude towards the murals are: 1. are informative [SD = 1.27], 2. help understand the pandemic [SD = 0.92], 3. easy comprehensible drawings [SD = 0.90], 4. understood the fatality of disease [SD = 0.92], 5. help in remembering health protocols [SD = 0.87], 6. used as a quick reminder in the streets [SD = 0.80], 7. created recall for social distancing [SD = 0.76], 8. created a sense of responsibility towards self [SD = 0.90], 9. created a sense of responsibility towards the nation [SD = 0.89], 10. created a necessary scare about the pandemic [SD = 0.78].

Response

After being exposed to murals related to COVID-19, as a response, 79% of the population started following health advisories, and 73% think that the murals should be used for communicating other health related information as well, not just about COVID-19.

In addition, open-ended questions were asked, which assisted in further probing and helped the researcher gain a better understanding of the respondents' responses about what all health protocols or advisories did they follow after being exposed to murals of COVID-19. The most commonly answered statements are 'started wearing a mask," 'got vaccinated," and "used sanitizer'.

Comparison of relationship between variables

It is essential to decode the relationship between the various user profiles by contrasting the ways in which the variables are grouped. The data was split by the filter of occupation; then the looking at the variable 'usefulness of murals' reveals that students and the unemployed population of the sample find the efficacy of the murals more than the people who are working full-time or part-time jobs. (Table 4).

Thematic analysis of semi-structured Interviews

The following themes were found after conducting a thematic analysis using the Braun and Clarke method (Table 3): the effectiveness of street art (murals) for health communication; collaboration in the execution of street art; and an efficient communication tool for urban poor population.

Effectiveness of street art (murals) for health communication

Street art has the potential to capture people's attention and generate awareness about specific

Table 3: Summary of Thematic analysis of Interviews

Codes	Sub-themes	Themes
COVID-19 pandemic related information Promotes health Important advisory about pandemic	Useful in communicating health related information	Efficacy of street art (murals) for health communication
Grabs attention multiple times Strikes conversation around the topic Stays for a longer time Internet information overload	Attracts & develop recall	
Awareness about the issue Educate people	Creates awareness	
Following advisories Changed practices Influence choices	Changes behaviour and practices	
Regional language for easy understanding Easy drawings for better understanding Quick to read and understand Use of simple phrases	Easy to comprehend	
Not painting on private property Government buildings are used for street art Budget allocation for mural painting Government plans the outline of artwork	Role of Government	Collaboration in execution of street art
Tie-up with local artist and painters Mural making competition in schools Volunteers' participation	Initiates participation	
Murals painted are posted on social media Social media are digital streets	Hybridisation	
Lack of digital devices Lack of funds Lack of knowledge to operate digital devices	Digital divide among urban poor	Efficient communication tool for Urban poor population
Volunteers know the audience Volunteers understand the local population Volunteers belonging to same community	Understanding of the target group	
Target audience-relevant content Reaches the target group efficiently Benefits illiterate/uneducated Beneficial for villages/urban poor areas Attract school going children of poor regions	Efficient communication tool for the underprivileged	

health issues. Murals placed in public spaces can draw the attention of passers-by, making them more likely to engage with the message being conveyed. Eye-catching and visually appealing artwork can pique curiosity and initiate conversations, leading to greater awareness of health topics.

Collaboration in execution of street art
The process of creating street art frequently includes participation from local artists and school students. This involvement helps to cultivate a sense of ownership and pride in the artwork, and it also encourages members of the community to take an active role in promoting health-related messages. The government predetermines the themes for the NYKS communications, but participants are still free to use their own distinctive creative approaches.

If we have to do mural paintings, we have to identify the school going children who are interested in art. We organize painting competitions which includes cash prizes; especially in Government schools and also connect with local artists by giving them information about the theme. (NYKS Official 1)

When communities are given the opportunity to participate in the development and installation of murals, they become more invested in the issues that are being addressed, which ultimately leads to increased engagement and sustainability of health initiatives.

Efficient communication tool for Urban poor population

Communities that do not have access to the internet may still receive vital information through the use of street art. Murals provide a medium for the dissemination of information that may pertain to topics such as public health, emergency services, educational opportunities, community events, and local resources.

'A lot of people do not have smartphones. You still need the internet for that, even if you have a smartphone. Not everyone has enough money for their needs. So, there needs to be street art.' (NYKS Official 2)

Because of this, individuals are able to maintain a level of awareness regarding the events and services that are taking place in their region especially when the murals are made by their regional volunteers. Community volunteers frequently have relationships and trust built up with local residents. They speak the similar language as the community and understand the jargons that can foster stronger relatability with the content.

'People in poor urban areas are not educated. So, we should focus on Hindi, which is our native language. The rest of the educated people have gone to school and can understand English. But the Hindi language should be used more.' (NYKS Volunteer 2)

'People will understand it better if it is written in simple Hindi words. If we write complicated sentences, even if they are in Hindi, people won't understand them, and then we will never be able to solve our purpose, which is educating people. People who want to reach us won't get anything out of it, and they won't learn anything.' (NYKS Volunteer 3)

Since they are recognized as familiar faces, neighbours, or friends, it is easier to talk openly and to be willing to share experiences, worries, and aspirations. Volunteers are able to gather important data and insights from the community thanks to this trust.

Discussion
After analyzing murals, understanding the attitudes and behaviors of the urban poor, and conducting interviews with officials from NYKS and volunteers, we were able to arrive at the conclusion that street art is an effective method of communication, particularly for people who are unable to participate in the digital ecosystem. This was determined by triangulating the data collected from the three different methods. As per the objectives that emerged.

Ob1. To evaluate street art as a tool of communication for the urban poor in New Delhi.

The overall theme of the murals is focused on the COVID-19 pandemic, its awareness, and the importance of taking precautions to stay safe. The emphasis on the heroism and sacrifice of those fighting during the crisis, observing health protocols, and honouring the frontline workers is emphasised by the use of bold colours and images of healthcare professionals and other frontline workers. All of the murals together denote that they are aimed at specific demographic groups in order to spread information about the COVID-19 pandemic and encourage awareness and preparation. The use of COVID-19 advisory messages and slogans for resiliency and fighting the pandemic shows how clear the communication was. As we dive deeper into the layers of socio-economic behaviour of the population of New Delhi, the murals connote differently to different economic sections. The specific use of acronyms, bilingual texts, and the addition of the element of religion speak volumes about the myths that are prevalent in the corners of this city and the mindset of people living around those streets where murals were painted. Compared to digital media, which contains highly volatile data and appears to be forgotten quickly, painted walls stay in people's line of sight for a longer period of time, which helps people remember the text and visuals for a long time due to the extended days of exposure. Thus, the murals, if well planned and executed, can serve as a powerful tool for spreading awareness and education about the any crisis and can serve as an important traditional tool for health communication.

Ob2. To understand how the target community responded to the murals created by NYKS in terms of awareness, attitude, informed choices, and changed practices towards pandemic COVID-19.

The murals have attracted the attention not only of those living in poverty but also of those who pass by and members of the community. Because of their size, colors, and imagery, they have been able to stand out in public places,

which has helped bring people's attention to the messages that are related to COVID-19.

Awareness: The murals have successfully conveyed clear and succinct messages about COVID-19, its transmission, and the preventative measures that can be taken. They have successfully communicated important information in a way that is visually engaging by utilizing visual elements, symbols, and text. This has assisted in making certain that the messages are easily comprehended by the audience that was intended for them. The underprivileged population has engaged with the murals in an active manner, holding conversations about them and sharing the information they have learned from them. Because of this engagement, it is clear that the murals have started conversations and piqued the curiosity of members of the community, which has resulted in a greater comprehension of the pandemic and the effects it has had. Children in school were mostly responsible for starting this dialogue because they took part and were able to understand the social issues better than their parents, who don't know much about them and aren't educated about them.

Attitude: Residents of the community have shown that they were able to remember the information that was presented in the murals. They are able to recall key messages and discuss the significance of practices such as maintaining physical distance, practicing proper hand hygiene, and wearing masks. This retention rate and overall likeability demonstrate that the murals have successfully communicated the information about COVID-19 and have helped to reinforce that information.

Informed choices: The urban poor have inadequate finances, and their consumption of media doesn't necessarily mean its purchase. They borrow and share the media. This highlights the importance of accessibility and affordability in media for this demographic. Additionally, it also emphasizes the need for media producers to consider alternative distribution methods that cater to the sharing economy of the urban poor. The requirement that their children of school age attend online classes was the primary driver behind the decision to purchase an internet package. As a result, street art was the only form of media that they did not pay for.

Changed Practices: The murals' increased awareness has led to modifications in the poor population's behavioral patterns. There is evidence, such as observations or surveys, that more people are adopting preventative measures like wearing masks, washing their hands, and socially isolating themselves. This shift in behavior demonstrates that the murals have successfully influenced the audience to take appropriate actions to protect themselves as well as the communities in which they live.

Responses from the community have been positive. The murals have received positive feedback from the community in the form of surveys, interviews, and responses on social media platforms. Members of the community have expressed their appreciation for the increased awareness that has been generated and have acknowledged the influence that the murals have had on their comprehension of COVID-19. Collectively, these indicators demonstrate that the murals created by NYKS have been successful in raising awareness about the COVID-19 pandemic among the poor population, which has resulted in increased knowledge, changed attitudes, and the adoption of preventative measures.

Data availability statement
Data is available from the corresponding author upon request.

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