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# The negative and positive: perceptions regarding COVID-19 pandemic among an online sample of adults; qualitative study

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## **Abstract**

**Background** The novel coronavirus disease, which is a global public health issue, changed the regular lifestyle of public globally causing multitude of stressors. This study aimed to describe the perception regarding the COVID-19 pandemic among an online sample of adults in Sri Lanka.

**Methods** A descriptive exploratory study was conducted with a purposive selected sample of general public in Sri Lanka. Twelve in-depth interviews were conducted using a semi-structured interview guide until data saturation. The data were analyzed using thematic analysis.

**Results** All participants were below 50 years and educated upto advanced level. Seven themes were identified based on in-depth interviews; (1) traditional views regarding disease; (2) fear; (3) disrupted future plans; (4) impaired sense of responsibilities; (5) intense work stress (6) time to cherish, and (7) anticipated adjustments for future pandemics.

**Conclusions** People have experienced fear, uncertainty, distracted future plans, and work stress due to the pandemic. However, they have also enjoyed spending time with their family members during this period.

Keywords Covid-19, Sri Lanka, Public, Perception, Experience

## Introduction

The novel coronavirus disease 2019 (COVID-19) was rapidly spreading worldwide from 2019 onwards [1] and Sri Lanka had to start fight with COVID-19 within the first few months in year 2022; due to the emerged situation, the Government of Sri Lanka recommended lockdown and travel restrictions as most Western countries especially for main/urbanized cities rather than rural areas in Sri Lanka. Further, Sri Lanka has been facing

a huge economic crisis as a developing country after COVID-19 pandemic; it influenced every aspect people life and convert to online approach for most household chores and educational activities which was not a very familiar technique for our nations [2–4]. Therefore, this global public health issue causing serious physical, social, economic, and psychological implications in our country and in other countries too [5, 6]; the impact of COVID-19 to healthcare system, economy, and culture made a direct impact on the everyday life of the public [7, 8]. For instance, changes in regular lifestyle and various stressors such as irregular or less supply of usual supplies contributed for anxious and unsafe feeling to the public [9]. Furthermore, the pandemic caused a variety of challenges and hardships for the public, disturbed many

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routines and duties of many workforces, such as frontline healthcare workers (HCWs) and military forces [10], and stressed and isolated families and specific communities worldwide. Education of children and adolescents was restricted and withdrawn from school, outdoor activities, and social life [11].

A study in United Kingdom (UK) explored the perception and experiences of social distancing and social isolation during the COVID-19 pandemic among the general population highlighting loses, including loss of motivation, loss of meaning and loss of self-worth [11]. Also, it is explored that the general public possess a sense of uncertainty around the future and social restoration [12, 13]. Sadati et al., (2020) [12] identified the experience among nurses in Iran emphasizing the negative experience such as worst perceived risk, defective preparedness, sacrificial commitment family protection, and social stigma. Similarly, the stigma and discrimination due to COVID-19 has been reported among community dwellers in India as well [13]. Public in Jordan also had believed that COVID-19 was developed in the lab, bacterial in nature, and it is a "punishment from God" while further a better perception on COVID-19 nature, cause, and symptoms [14]. Quarantined individuals in Ethiopia, such as nurses, doctors, members of parliament, farmers, merchants, drivers, daily laborers, and students had several aspects of negative adverse outcomes due to COVID-19 mainly affected physically, socially, and economically while encountering the quarantine errors and injustice [15].

Similarly, they also experienced discrimination, stigma, and loneliness even after the quarantine in society and sudden restrictions on travel caused the financial losses [15]. Due to such sudden changes, some victims have accused the authorities; their regular income has been reduced, and they lost their usual jobs even [16] making them trouble in day to day lives. As reported in a study, Rohingya refugees had to face very horrific stories during COVID-19 as they had to depend on external sources for food, security, water supply, health services, etc. while maintaining social distances was another burden, and not practically happened and insurmountable [16]; once cases were reporting inside the camp, military and police had sealed the camp and started the rapid actions caused to stop roaming of Rohingyas; further, they allocated only emergency transportations after authority permission [16].

In Sri Lanka, a few studies focused on this important area in quantitative approach. In a study conducted among Sri Lankan students who studied in the UK experienced different psychological patterns (e.g., fear, worry, anxiety, irritability, and agitation) and behavioral patterns (e.g., adherence to the safety precautions) due to the impact of COVID-19. Among them, some students reported positive changes, such as paying more attention

and dedicated more time for academic activities, exploring new hobbies, and improving healthy coping skills [17]. The social life of public in urban-rural communities, including different ethnicities, revealed that they contacted close family members and shared their worries [18].

With this background, it is highly appreciated if a qualitative nature study explores the issues in-depth to understand the real inner perception. Hence, this study was aimed to explore the perception of the general public during the COVID-19 pandemic in Sri Lanka. The aim of this study was to describe the perception regarding the COVID-19 pandemic among an online sample of adults.

## **Methods**

#### Study design, setting and sample

A descriptive exploratory study was conducted to better describe individuals' perceptions because this method enables researchers to explore a topic with limited literature.

We recruited a purposive sample of the general public in Sri Lanka to this study. We excluded people with diagnosed physical or psychological disabilities, people who did not consent to participate, children less than 18 years old, and those who could not understand Sinhala and English.

# **Data collection**

We conducted in-depth interviews (IDI) between February 2022 and May 2022. These interviews were used to collect the qualitative data using a semi-structured interview guide. IDIs# are effective qualitative method for getting people to verbalize their personal opinions, experiences, and feelings. IDIs ensure privacy and confidentiality, and participants may feel more comfortable in expressing their negative attitudes, feelings, and experiences, but on the other hand free expression of ideas could cause data contamination [19]. These IDI were carried out via telephone, and as Viber, WhatsApp, Messenger, and Imo conversations with both audio and visual screens as long as social distancing is recommended. All the IDIs were facilitated by a trained moderator and note taker who monitored the body language of participants and took notes to create a non-threatening supportive environment in order to encourage participants to share their views freely. Each IDI was conducted for 30–60 min. Altogether, twelve IDIs were conducted until the saturation point was achieved.

In this descriptive explorative study, the sample size of twelve participants was deemed sufficient for several reasons. Additionally, data saturation was achieved, as no new themes emerged after the 12th interview, indicating that the collected data was sufficient to address the research question. Furthermore, similar studies in the

field have successfully used similar sample sizes, providing a precedent for our approach, Saturation can be reached in studies involving a relatively uniform study population and narrow objectives, typically within a limited number of interviews of 9–17 interviews [20]. Each IDI was audio-taped, and tapes were transcribed verbatim to ensure data analysis.

#### **Data collection instrument**

A semi-structured interview guide was used to collect data. It allowed exploring the perception and experience of the participants as it enabled them to elicit a vivid picture of the participants' perspectives on the area. Detailed guides with probes are presented in Supplementary file 1. The guide was pilot tested with five persons and no changes were made.

# Data analysis

The thematic analysis method [21] was used for data analysis related to perceptions regarding the COVID-19 epidemic. The research team members carefully read and re-read each transcript after cleaning the data by removing unnecessary details. The step was followed by listening to audio-recorded interviews with a view to becoming familiar with the whole data set. Thereafter coding was started. Three researchers did initial data coding independently. The data from the 12 transcripts were coded separately to minimize subjective bias. Then, the research team reviewed and validated the codes together. Related codes were then merged together to derive themes based on their similarities and differences. Thematic analysis necessitates a process of grouping and recoding codes with the ultimate aim of ensuring that the data within the theme is cohesive and that the themes themselves have distinctive differences [21]. Once finished the process themes were generated. The generated themes were reviewed to recheck the appropriateness of the themes.

# Trustworthiness

To ensure of trustworthiness of data, the criteria of credibility, confirmability, dependability, and transferability were established according to Polit and Beck [22]. During each interview, the researcher observed the participant's behaviors and mannerisms and wrote notes in a field diary. These field notes were incorporated into data analysis. All the interviews were transcribed verbatim by the research team to help with immersion in the data. All transcripts were translated into English and discussed with the research team. Additionally, researchers conducted interviews until saturation was reached to ensure prolong engagement [23]. Collectively, these measures assisted with establishing the credibility of this study. During data analysis, a codebook was prepared, and the decisions made during analysis were

recorded in a notebook; these strategies provided an audit trail and assisted with establishing confirmability. Dependability was demonstrated by the researcher documenting detailed information about the study setting, participants, data collection process, and analytical steps. Moreover, the same interview guide was used to each participant to ensure dependability [24]. Finally, transferability was enabled through the detailed descriptions of participants' perceptions in the findings and through recruiting a purposive sample [24].

#### **Ethical considerations**

Ethical clearance was obtained from the Ethics Review Committee, Faculty of Allied Health Sciences, University of Ruhuna, Sri Lanka. Informed consent was obtained from the participants verbally to reduce the risk of disease transmission through potentially contaminated papers and pens. The participants were informed about the anonymity and confidentiality of audio files. Identifiers were used to number participants, and all identifying information was removed. There was no conflict of interest among the investigators, and neither there was any social, financial, or legal issue.

#### Results

# Sociodemographic characteristics

The majority of participants were female and below 50 years in age. Additionally, they were educated up to an advanced level and were married.

#### **Themes**

### Themes and subthemes

We generated seven themes after analyzing the data of 12 IDIs. They were (1) traditional views regarding disease; (2) fear; (3) disrupted future plans; (4) impaired sense of responsibilities; (5) intense work stress (6) time to cherish and (7) anticipated adjustments for future pandemics. These details are shown in Table 1.

## Theme 1: traditional views

A majority of participants had a good understanding of the disease and disease process, and they know that it is important to take necessary precautions to get protected from this disease.

One participant stated "If we take proper precautions, we can protect ourselves. Anyway, we have to take our own responsibilities to protect ourselves." (P10).

Sri Lanka is a country that is highly bound with the religious and extraordinary powers where majority with Buddhists'. Their thinking pattern also has shaped according to their religious beliefs. Though they have

**Table 1** Themes and subthemes

| Table 1 Themes and subthemes |   |
|------------------------------|---|
| Themes                       | Subthemes                                   |
| Theme 1                      | Self-definition of the disease and process  |
| Traditional views            | General understanding and awareness         |
|                              | Religious perspective                       |
|                              | Internal value system                       |
| Theme 2                      | Somatic fear                                |
| Living with fear             | Fear of dying                               |
|                              | Fear about the close relatives              |
|                              | Fear of separation                          |
| Theme 3                      | Uncertainty of the existing condition       |
| Disrupted future plans       | Ambiguity of the future actions             |
|                              | Rampant situation                           |
| Theme 4                      | Geriatric care of family members            |
| Impaired sense of            | Education demands of the children           |
| responsibilities             | Inability to pre arrange family activities  |
| Theme 5                      | Novelty to the technology                   |
| Intense work stress          | Novelty the concept of work from home       |
|                              | Difficulty to handle work and home environ- |
|                              | ments and demands                           |
| Theme 6                      | Being with family members                   |
| Time to cherish              | Enjoy environment                           |
| Theme 7                      | Transportation and distribution matters of  |
| Anticipated adjust-          | the essential things                        |
| ments for future             | Lack of readiness of the government         |
| pandemic                     | Inadequate experience                       |

knowledge of disease and its nature, some participants believed this is a disease that has a huge relationship with "Karma" (good or bad things that a person does according to Buddhism).

"Though it is said that COVID-19 can be spread by an infected person due to wrong habits, I think it is a disease related to Karma. If I do good things, I will not get it. Look, I did not get it because I looked after my brother who got it." (P6).

#### One participant stated that,

"It is a punishment of the god for a man who follow wrong behaviors and once punishment or karma is over, the disease will be cured, otherwise he will die. In previous years, we destroyed our nature in a bad way. That is why we got this punishment from the god." (P1).

#### Theme 2: living with fear

In general, almost all the participants experienced different degree of fear including somatic fear of the disease, fear about their family, fear of dying, and fear of separation from the family.

Participants explained that they always felt fear if they get even mild respiratory symptoms.

"If I feel a sore throat or running nose, I cannot control my mind. I feel definitely that I have corona, I want to be away from my family members and feel anxious. Sometimes, when I hear the news, I feel that I have more similar symptoms." (P2).

Participants explained once their family members have to go out especially their elderly parents and their children, they feel fear and anxiety.

"Once my mother went out, I feel what would happen to her if she forgot to wear a mask or to wash her hands." (P3).

One participant stated that "My little one is not willing to wear a mask, always wants to remove it. So, once he goes out, I feel severe fear." (P5).

Sri Lankan people typically have strong bonds with their family members, and many live together. Therefore, they fear being separated from their closest ones, whether permanently or temporarily.

One participant said "I cannot even think how I live without my kids and again I don't know what they will do if I die." (P7).

Another one stated "If I have to go to a quarantine center, I do not know whether I will get a chance to come back and see my parents and my family members again. I do not know how they live even a little time period without me." (P9).

# Theme 3: disrupted future plans

The Sri Lankan government changed the rules and regulations concerning daily functioning during the COVID-19 period. Due to the sudden closure of the country, restriction of movement, and limitation of direct contact with people, the majority of people lost their jobs and income, and some people were locked in temporary residents (i.e., boarding places and hostels). There was an uncertainty as a cumulative result of the above reasons.

One participant indicated "I am a temporary worker and my husband is on his probation period. Actually, we both are in a very uncertain condition. Due to the sudden closure of our workplaces, we don't know whether we get our salary or not. So how will we live in next month." (P8).

One participant who was a university student stated that she was in ambiguity about the university degree and her future job. "I am about to complete my degree this year and plan to join as a trainee in a well-reputed company next month. But due to this condition, the university has been closed since last month without reopening day and the company has also closed physically. They informed me that they do not have any interest in having a trainee at this moment because they must reduce their cost. I do not know what will happen to people like me." (P5).

Apart from the job uncertainty, some participants also were in a hesitation about the postponement of medical investigations and planned surgeries without a new date. One participant detailed it.

"I am a heart patient. After waiting around one year, my surgery was scheduled to do in last week, but due to this condition, they informed me that they could not give me at least a next date for my surgery. I am really worried." (P7).

# Theme 4: impaired sense of responsibilities

In the Sri Lankan traditions, children bear the main responsibility to look after their parents and other family members. People were unable to do any pre-arrangements as this was an unexpected condition, and people were really concerned about it.

One participant explained that.

"My two parents are sick and live alone. I am the only child. I am the person who brings food and medicine to them but, this time I was unable to supply them due to an unexpected extension of the moment restriction. I was really shocked and I was in fear about their life." (P1).

One participant explained how they felt restless due to the inability to meet a doctor or go to a pharmacy to buy essential medicine for their family members.

"My mother is a patient with diabetes and she had many complications. Those days, we did not have any access to buy her regular medication or to go to a regular clinic. Finally, she complained a lot of complications and I was really stressed." (P6).

During this period, the first-time government introduced online teaching for school children. Since Sri Lanka is still a developing country, the availability of smart mobile phones and network coverage was considerably low during this period.

One participant stated.

"My daughter has to sit her grade five scholarship examination this year and my eldest one has to sit for his ordinary level examination. I have only one phone and we do not have any other access. My daughter and son both have parallel classes. To whom should give my phone? Sometimes, I feel unbearable pain and guilty when I see their faces." (P8).

# Another participant stated that

We do not have proper network coverage. Once they want to connect to online classes, they climb 20 to 30 feet to detect internet signals. What can I do? (P2)

#### Theme 5: intense work stress

The Government commenced work from home initiatives during this period. The working hours concept was changed without an exact time period, people have to work. To achieve day targets, people had to work more than 12 h per day without rest. Some were exhausted, and their whole lifestyle was changed.

One participant stated.

"In the morning, I prepared some food for me and my husband. Then we sat at the same table and started to work on our own laptops. Though we sat in the same place we didn't have even a small time to say hi to each other. Now we are burnout and feel it is not possible to work further. Before, Covid, we had much time to spend together." (P4).

# One participant said.

"Though there is no need to go to the office, expectation is so high. My brother started his work at 6 o' clock in the morning and finished it at 8 o' clock in the evening. During that period, he ate junk food as it was easy to eat, and he did not stand his chair at least to go to the washroom. He gained 4–8 kg than before the covid period and has multiple unhealthy consequences due to a sedentary lifestyle." (P3).

Due to this condition, working women got exhausted when they have small children. Daycare centers were closed, and it was not possible to get support from babysitters. Women covered office work apart from household activities.

"Several times, I felt, it is better to say goodbye to my job. But it is my sole income that I have to spend for my parents and unmarried sisters. At night, I don't have time at least to go to bed, I am fully exhausted." (P4).

#### Theme 6: time to cherish

Though, there are a lot of negative aspects that resulted due to movement restriction and lockdown, almost all the participants highlighted a positive side of the lockdown.

One participant explained.

"During this lockdown, I understood that I have worked as a robot and I have missed my-self. However, I was lucky enough to enjoy my life with my small children and family members. Family interactions during this time was optimal. I found inner happiness and peace." (P5).

One participant verbalize it in this way.

"We have number of friends and relatives. However, due to this lockdown, I understood who the most important people in my life are. Furthermore, I understood that I had spent my time without proper concern on time. Moreover, we can find happiness without using the social media or television." (P12).

During this period, Sri Lankan government encouraged people to grow vegetables and fruits in their own spaces. Therefore, people started to grow even in small lands by using alternatives such as indoor plants.

"The first time I got to know that it is much interesting and joyful to have our own cultivations of fruits to eat. I understood the value of it. Therefore, I am planning to continue it." (P6).

# Theme 7: anticipated adjustments for future pandemic

The majority of participants had a negative perception of services given by the government, especially the distribution of grocery items during the lockdown. Therefore, they suggested that the government should be prepared for a well-supervised and organized programme to face future pandemics.

One participant stated.

"It is highly disappointed. Though the government announced, none of the vehicles were reaching to our village to sell even essential food items and groceries. We waited to buy them. Instead, we ate jack fruit (Artocarpus heterophyllus) and manyokka (Manihot esculenta) with our kids. Therefore, it would be better, if the government could have a pre-arranged plan of distributing essential items for people despite such a disaster with pandemic." (P7).

Some participants suggested to convey the precautionary measures to the public by religious leaders would be

an appropriate measure as Sri Lankans usually listen and adhere to the religious leaders.

"My mother or father or aunt or uncle do not use mask properly. They find various excuses and make lots of arguments regarding them. But they are always listening to the monks and try to live as per their advice. Hence, it would be a good solution if we can convey knowledge related to the disease through religious leaders." (P8).

Some participants suggested supervising the adherence of people to the recommended guidelines for prevention and quarantine and punishing them when they are failed.

"If we can punish at least a few people, then others would be afraid and will adhere to the guideline." (P10).

Due to the sudden lockdown of the country, some people lost their social interactions, leading to boredom and monotony. Their psychological condition deteriorated badly as a result. Therefore, participants suggested arranging well-organized psychological supportive mechanisms to support solidity people as elders.

"I think it would be better if we have a pre-planned psychological supportive programme for people in need." (P12).

## **Discussion**

This exploratory study explored the perceptions of the general public during the COVID-19 pandemic in Sri Lanka. From our in-depth interviews we emerged seven themes namely; feelings regarding the disease, fear, distracted future plans, impaired sense of responsibilities, work stress, enjoying freedom with the closest one, and suggestions for future pandemics. The themes were generated by the thematic analysis method as it is a systematic method of categorizing and organizing data.

Participants' positive perceptions about the disease and the preventive measures helped to enhance their willingness to adhere to the recommendations of the local authorities [14]. In general, all participants in the present study have shown some kind of knowledge and positive perceptions of the disease process and preventive measures, but they have conjugated this knowledge and perception with their religious beliefs and traditional values. They have given their own interpretations to the disease process. In accordance with the findings of this study, Khabour et al., found that people in Jordan also believed that this was the "punishment of god". It seems that it is a common misconception when a life-threatening pandemic occurs. However, it is too early to explain the effect

of these perceptions on the common thought processes of the participants regarding the disease control process, since it is ambiguous. Participants in this study, highlighted the importance of implementing punishments to control the spread of the disease, similar to our study. People had been punished under criminal law in Australia [25]. It would be a wise decision to collect some fine as a punishment to protect innocent persons from victims who don't adhere to the health measures.

Fear is the basic defense mechanism of the human being against perceived or real threats when people are faced with uncertainty or the unknown. Hence, it is understandable that people are experiencing fear in the context of this pandemic, and fear was reported around the world among all ethnic groups [26]. Participants in this present study believed COVID may drastically jeopardize them, their family members, and their regular lifestyle. Besides, all participants experienced fear of the permanent detachment of their family members. That may be the underlying cause for the fear. However, this fear may increase psychological distress that leads to decreased health and quality of life [26]. As in the previous research, government policies and the level of information given to the public directly affect the level of fear. Hence, effective communication about disease progression and prevention may effectively ease community fear [27].

Generally, participants are uncertain about their future. The reason may be the insufficient and culturally tailored understanding of the COVID-19 disease process and its future behavior. Moreover, the inability to predict the eradication date of COVID-19 from the world has escalated the feeling of uncertainty. Therefore, they have more stress regarding their future and future careers. Another qualitative study in UK reported a similar idea under the "loss" theme [28]. They explained some of these losses as practical, social, and economic losses; the loss of (in-person) social interaction; loss of income; and loss of structure and routine. It was observed that people share common feelings irrespective of the country and culture. Hence, it is essential to encounter these ideas when developing disaster management plans for future use.

In a highly traditional and religious country such as Sri Lanka, participants have huge family responsibilities but due to the imposed moment restriction, they were unable to be involved in habitual work such as old parents' visits. Further, it is a challenge to find some essential goods, such as food and drugs due to a disorganized supply chain. The introduction of new online learning technology for school children and university students also has placed an additional burden on the parents. However, this was facilitated through the Lanka Education and Research Network (LEARN) by the Sri Lankan

government in the late stages. Parents are enormously worried regarding their children's education and future due to the unavailability of well-established network coverage, lack of devices, and insufficient computer literacy among parents and students. However, at late stages, some studies in Sri Lanka have found that university students have appropriately adhered to the online methods [29].

The Sri Lankan government as in other countries introduced telework or remote work. The main form of telework is "work from home" (WFH). Once introduced work from home concept work norms and work hours changed with the aim of adjusting to the new situation around the world. In agreement with the present study, several studies have reported that WFH has a strong relationship with job stress and mental health [30, 31]. This finding may be attributed to poor supervision, and coworker support [31], and it may lead to lower social support. The workers' mental health and the organization's resilience may be enhanced by providing quality communication and peer support [32].

Due to high family and personal demands, all breadwinners need to work hard. Besides, the high usage of digital devices may be a significant factor for those who had lost connections with family members before the epidemic. But, due to the sudden closure of the country, all family members should work together not only on the paid job but also on domestic chores, childcare, teaching their children, and caring for their old family members. In accordance with our study, several studies found positive attitudes toward the COVID-19 pandemic. As mentioned in these all studies, including the present study, some participants had taken this time as a gift of extended time together and enjoying family relationships [33]. Contrasting to these findings some studies have reported that being family together has led to home violence and divorce in some countries. Positive attitudes may help family members than negative attitudes to develop family resilience against the pandemic. Thus, it would be worth considering whole family members as a single unit when developing mental well-being programmes (i.e., planting team games).

The action of the public health systems of some countries, including Sri Lanka is not equivalent to the speed of the spread of the virus, resulting in high mortality rates and a considerable fall down of the health care systems of these countries. It is difficult to face a disaster like this without previous experience or pre-acquired knowledge since this is an unprecedented condition in a country like Sri Lanka. Due to insufficient planning by the high authorities, the general public has to suffer a lot to find, especially food and drugs. Mainly, people in rural areas found food somewhere, but they struggled to find medicine. On the other hand, people in urban areas, especially

people in flats and slums suffered more without essentials, such as food and drugs.

Participants of the present study and another Sri Lankan quantitative study highlighted the necessity of an emergency preparedness plan to deal with sudden outbreaks of an infectious situation [10]. Early in the pandemic, Sri Lankans didn't have adequate knowledge or experience to handle such situations like other countries, and COVID-19 was a colossal disaster that occurred in this century [10]. Further, it requires a plethora of new public health measures to mitigate covid-19 negative impacts and consequences. Therefore, it is a necessity to have a well-prepared public awareness programme along with other health measurements. The participants in this study suggested involving religious scholars in these awareness programmes to enhance adherence. Sri Lanka is a highly religious country, and people are more prone to follow religious scholars' pieces of advice. Interestingly, a qualitative study in Jordan also made a similar suggestion. Further, they have suggested doing these programmes at religious places. It seems that religion and its scholars are still capable of making a significant impact on human thinking patterns around the world, even in the 21st century. Thus, it would be worth considering it when developing future disaster management plans.

# Strengths and limitations

This study has many strengths, such as the high response rate and the use of a well-prepared semi-structured guideline. This will help the policymakers to realize the actual perception of the general population. It would be helpful to develop a more effective disaster management plan for future pandemics. One limitation of this study is a social desirability bias which can be encountered in in-depth interviews. However, we observed that it was reduced since this was conducted via an online method. However, this online approach may limit the participation of people with network challenges. Another limitation is that the sample belonged to the same ethnicity, hence these findings might not reflect the opinions and experiences of people from other parts of the country. Moreover, the lack of a theoretical framework is a limitation of the study.

#### **Conclusions**

The majority of participants' perceptions have been shaped by their religious and cultural beliefs. Though people experience fear, uncertainty, distracted future plans, and work stress due to the pandemic, some participants considered this as a gifted time in which they got to be with their family. However, well-prepared public health awareness programmes should be delivered through religious scholars to enhance the compliance of the public.

# **Supplementary Information**

The online version contains supplementary material available at https://doi.or q/10.1186/s12889-025-22168-7.

Supplementary Material 1

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#### **Author contributions**

TS contributed to data collection, data analysis, and manuscript drafting. MW conducted manuscript drafting, and final revision. NR contributed to manuscript drafting. EW contributed to data collection and manuscript drafting. HM contributed to data analysis and manuscript drafting. All authors read and approved the final manuscript.

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#### Data availability

No datasets were generated or analysed during the current study.

#### **Declarations**

#### Ethics approval and consent to participate

Ethics approval for this study was granted by the Ethics review committee, Faculty of Allied Health Sciences, University of Ruhuna, Sri Lanka (Ref no: 02.06.2020: 3.3). All participants provided informed consent to participate, collected via an information sheet and consent form. All methods were carried out in accordance with relevant guidelines and regulations.

#### **Consent for publication**

Not applicable

#### **Competing interests**

The authors declare no competing interests.

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