



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**

'A Bridge Between Laboratory and Reader'

www.ijbpas.com

PREPAREDNESS OF URBAN POPULATION TOWARDS COVID-19: AN ACTION FRAMEWORK

SADDAM HUSSAIN¹, SOLANKI KARINA, SONERA SWETA, SONI PRIYA, SUVAN
NIPA²

¹Assistant Professor, Community Health Nursing, ²B.Sc.Nursing Students,
Sumandeep Nursing College, Sumandeep Vidyapeeth an institution deemed to be University,
Vadodara, Gujarat

*Corresponding Author: Saddam Hussain: E Mail: saddamhussein0610@gmail.com

Received 15th June 2021; Revised 10th July 2021; Accepted 24th Aug. 2021; Available online 25th Jan. 2022

<https://doi.org/10.31032/ijbpas/2022/11.1.2006>

ABSTRACT

BACKGROUND: Coronaviruses cause disease in a wide variety of animal species. • SARS-CoV was transmitted from civet cats to humans in China in 2002 The spread of the COVID-19 pandemic across large number of nations is an unprecedented situation in recent times.As on 31th January 2020, a total of 9720 confirmed cases and 213 deaths have been reported in China.The number of cases reported in india now stands at 13,387 of which 11,201 are active cases and among them 392 deaths reported according to ministry of health. The Indian state governments have responded to the 2020 coronavirus pandemic India with various declarations of emergency. However maintained that the rate of infection is growing, with one in every 24 samples testing positive.**Aim:** The aim of this study to improve the practice to prevent Urban population from spread of COVID-19. **Design and methods:** A descriptive study was carried out on 60 People of urban population who belong to selected urban areas of vadodara city, and between the age of 18-50 years in Vadodara, Gujarat.vadodara. People were selected by Non-Probability convenient Sampling Technique was used.Data analysis is the systematic organization and synthesis of research data. For this study, the data obtained were analyzed in

respect to objectives of the study by using inferential statistics. **Result:** With regards to the assessment of preparedness of COVID-19, Out of 60 Respondents, 2 respondents (3.33%) have inadequate knowledge, 41 respondents (68.33%) have moderate knowledge and 17 (28.33%) have adequate knowledge regarding COVID-19. **Conclusion:** The present study revealed that preparedness of COVID-19 among general population is on rise in urban areas. Hence, It is essential to create awareness about COVID-19 to health care service among urban population, activities like hand washing, social distancing wearing mask are some of the intervention that can prevent the spread of COVID-19.

OBJECTIVES:

- The aim of this study to improve the practice to prevent Urban population from spread of COVID-19
- To evaluate urban people awareness about COVID-19
- Find out the association between knowledge and selected demographic variable regarding preventive measures from corona virus.

METHODS AND MATERIALS : A Descriptive study was carried out 60 covid 19 pepole who were gain the knowledge about covid 19 in vadodara urban population.

Result: With regards to the assessment of preparedness of COVID-19, Out of 60 Respondents, 2 respondents (3.33%) have inadequate knowledge, 41 respondents (68.33%) have moderate knowledge and 17 (28.33%) have adequate knowledge regarding COVID-19.

Keywords: *Preparedness, Urban Population, COVID-19, Prevention, Urban Area*

INTRODUCTION

The Ministry of Health and Family Welfare (MoHFW), GoI is closely monitoring the outbreak of respiratory illness caused by a novel (new) coronavirus (termed “2019-nCoV”) that was first detected in Wuhan City, Hubei Province, China and which continues to expand.

On 30 January 2020, Director-General WHO declared that the outbreak of novel coronavirus (2019-nCoV) constitutes a

Public Health Emergency of International Concern (PHEIC) as per the advice of International Health Regulations (IHR) Emergency Committee.

As on 31th January 2020, a total of 9720 confirmed cases and 213 deaths have been reported in China. The epicenter of the outbreak was initially in Wuhan City, Hubei province but has rapidly extended to all other provinces of China.²

Outside of China, 19 countries have reported a total of 106 confirmed cases, most with travel history from China. These countries are Australia (9), Cambodia (1), Canada (3), Finland (1), France (6), Germany (5), India (1), Italy (2), Japan (14), Malaysia (8), Nepal (1), Philippines (1), Singapore (13), South Korea (11), Sri Lanka (1), Thailand (14), UAE (4), USA (6), and Vietnam (5).

Coronaviruses cause disease in a wide variety of animal species. • SARS-CoV was transmitted from civet cats to humans in China in 2002 and MERS-CoV from dromedary camels to humans in Saudi Arabia in 2012. Several known coronaviruses are circulating in animals that have not yet infected humans. A spillover event is when a virus that is circulating in an animal species is found to have been transmitted to human. Human to human transmission: Based on current available information, coronaviruses may be transmitted from person to person either through droplets or contact.³

The spread of the COVID-19 pandemic across large number of nations is an unprecedented situation in recent times. To slow the spread of the disease and mitigate its impacts, travel advisories have been issued by many jurisdictions including India. However, shipping services are required to continue to be operational so that vital goods

and essential commodities like fuel, medical supplies, food grains etc., are delivered and to ensure that the economic activity of the nation is not disrupted. It is, therefore, important that the flow of goods by sea should not be needlessly disrupted without compromising the safety of life and protection of the environment.²

The first case of coronavirus spotted in the Indian state of Gujarat on 19 March 2020 from Rajkot, A 32-year-old man, who had travel history of Saudi Arabia, was tested positive and a second case of coronavirus is a 21-year-old woman from Surat, who returned from UK, was tested positive. First death reported in Gujarat on 22 March, 69-year-old man died in Surat. Government of Gujarat reserved 1200 bed Civil hospital only for COVID-19 patients.⁵

The Indian state governments have responded to the 2020 coronavirus pandemic India with various declarations of emergency, closure of institutions and public meeting places, and other restrictions intended to contain the spread of the virus., limiting movement of the entire 1.3 billion population of India as a preventive measure against the 2020 coronavirus pandemic in India .In which On 15 March, the Gujarat government announced the closures of schools, colleges, cinema halls till 31 March

and there is another declaration by our Prime Minister Narendra Modi ordered a nationwide lockdown from 12:01 am of 25 March for a period of 21 days. He said that the only solution to control the spread of coronavirus is breaking the cycle of transmission by social distancing. He also added that the lockdown will be enforced more strictly than the Janata Curfew. It may be extended more days if needed. The State borders have been sealed. Action will be taken against the people who will violate the lockdown," Lockdown was ordered after a 14-hour voluntary public curfew on 22 March, followed by enforcement of a series of regulations in the country's COVID-19 affected regions. The lockdown was placed when the number of confirmed positive coronavirus cases in India was approximately 500.

NEED FOR THE STUDY

The number of cases reported in India now stands at 13,387 of which 11,201 are active cases and among them 392 deaths reported according to the Ministry of Health. The government however maintained that the rate of infection is growing, with one in every 24 samples testing positive.¹

On date April 10, 2020 mass sampling was done in Vadodara. In which total 21 positive cases found at Nagarwada area. So the total

positive cases in Vadodara stands at 39. It is expected that more positive cases will be reported as the testing capacity increases. Moreover, there are another cases tested positive at around 7 positive COVID-19 cases of Nagarwada visited a hospital in Tandalja and interacted with locals. Around 7 positive COVID-19 cases of Nagarwada visited a hospital in Tandalja and interacted with locals. Nagarwada-Saiyadpura & Tandalja areas are declared as a red zone where mass sampling will be carried out.⁷

World rewards innovative thinking, and it would be more so in the emerging world post COVID 19, not limited to current COVID 19 period. Some people may have more intuitive bent towards innovative thinking, as they think differently. But innovative thinking can be developed also. Also for either type of people, practicing innovative thinking is a great exercise to increase Innovation Quotient. Practicing can be done by examining newer innovative solutions to appreciate the beauty of what was the need, what were the constraints, and how a solution emerged. On the other hand, innovative thinking gets sharpened by working towards creating innovative solutions to some needs which you see.¹¹

Social Distance: Requiring to keep 1 to 2 meter distance is a new requirement --

suggest innovative solutions to enable keeping such a distance or possibly alerting you and others of such violations. Personal Hygiene: Corna - Covid 19 requires one to wash hands frequently (properly: 20 second - back of hands - between fingers), avoid touching other surfaces or touching one's face should one have touched surfaces etc.¹⁰

Innovative solutions can be help washing properly, alerting when one touches a surface, once touched movement towards face creates a buzz to remind one etc. There are any challenges, and not every solution may work under all situations at all times, but a solution does not have to be 100% to be useful. For utility a solution working in 90% of cases is useful as long as boundaries are defined and better solutions are not available. As per the reports, total confirm cases in Vadodara city are total 133 positive cases and active cases are 121, from which 7 cases recovered and total death because of disease are 5. Statistical data which shows the status of COVID-19 cases in Vadodara city area.

REVIEW OF LITERATURE

“Review of literature is defined as an extensive, exhaustive and systematic examination of publication to the research project.” Review of literature is a critical summary of research on a topic of interest generally prepared to put a research problem

in context or to identify gaps and weakness in prior studies so as to justify a new investigation.

- **Polit & Hungler, 1995**

• Literature review related to COVID-19

Yudong shi, juan wang, et al, (2020) was conducted a descriptive study on “**Knowledge and attitudes of medical staff in Chinese psychiatric hospitals regarding COVID-19**” study included 141 psychiatrists and 170 psychiatric nurses in the study. We found that during the COVID-19 epidemic, 89.51% of the medical staff of the psychiatric hospitals studied had extensive knowledge of COVID-19, and 64.63% of them received the relevant training in hospitals. Furthermore, about 77.17% of participants expressed a willingness to care for psychiatric patients suffering from COVID-19 virus infection. this study suggests that increased attention should be paid to the knowledge and attitudes of medical staff at psychiatric hospitals during the COVID-19 outbreak.¹²

Nasir, M. U, et al, (2020) was conducted a laboratory study to assess the The Role of Emergency Radiology in COVID-19: From Preparedness to Diagnosis. Infections associated with the SARS-CoV-2 virus (COVID-19) have the

potential to cause high morbidity and mortality in Canada. While the clinical symptoms and radiographic findings of this infection are not specific, radiology will play a crucial role in raising suspicion for potential COVID-19 cases, helping guide screening and identifying complications. By implementing the respiratory etiquettes, and institutional infection control measures, as radiology departments, we can do our part to minimize spread of this infection and ensure staff and patient safety.¹³

Yan Bai, MD¹; Lingsheng Yao, et al, (2020) was conducted an experimental study on Presumed Asymptomatic Carrier Transmission of COVID-19. Study held in Fifth People's Hospital of Anyang, Anyang, China, the findings in this report of presumed transmission by an asymptomatic carrier are replicated, the prevention of COVID-19 infection would prove challenging. The mechanism by which asymptomatic carriers could acquire and transmit the corona virus that causes COVID-19 requires further study.¹⁴

STATEMENT OF THE PROBLEM:

“Preparedness of urban population towards COVID-19: An action framework”

Objective:

- The aim of this study to improve the practice to prevent Urban population from spread of COVID-19
- To evaluate urban people awareness about COVID-19
- Find out the association between knowledge and selected demographic variable regarding preventive measures from corona virus.

Assumptions:

The study is based on following assumption

- Urban people will understand the severity of COVID-19 and took preventive measures
- They will improve their knowledge and practice regarding prevention from COVID-19
- Urban people are at risk of getting COVID-19 Infection because of their lacking at understanding of severity of COVID-19.

Hypothesis

H₀: There is no-significant association between knowledge and selected socio demographic variable regarding awareness of COVID-19

H₀₁: There is significant association between knowledge and selected socio demographic variable regarding awareness of COVID-19

Limitation:

- This study is limited to age group between 18 to 60 years of people.
- This study includes who are living in vadodara.

METHODOLOGY

The descriptive research design was adopted; the study was carried out in urban area of Bapod, Vadodara district of Gujarat. 60 subjects were selected by using Non-Probability convenient Sampling Technique.

General population who are aged 18 years to 60 years and conversant in speaking and reading Gujarati or English were included, General population who doesn't understand English or Gujarati, unwilling to give consent or cooperate to participate in the study, who are not available during the data collection periods were excluded, formal written permission was obtained from the Vadodara Municipal corporation health department, the data collection was carried out in the month of March – April 2021.

The investigators introduced themselves and explained the purpose of study, written consent was obtained with their anonymity and confidentiality of data, The investigators collected data using structured questionnaire included 30 Questions of concept, definition, sign and symptoms and prevention of COVID-19. The obtained data was analyzed using SPSS-20 software. More

specifically, Descriptive statistics (frequency and percentage, mean, standard deviation) were used to describe the subjects characteristics and level of knowledge regarding preparedness of covid-19.

Chi score tested use in order to find out the association between the level of knowledge regarding preparedness of COVID-19 and selected socio demographic variables. The level of significance was set at $p < 0.05$.

ETHICAL-ISSUES- Ethical clearance were obtained from ethical committee of SVICE of Sumandeep Vidhyapeeth as deemed to be university

FEASIBILITIES- ISSUES: No feasibility issues arise.

LIKELY OUTCOME/ BENEFIT OF STUDY: The research result was beneficial to family and health personnel to take action to reduce morbidity and mortality rate of COVID-19 by awareness regarding covid-19 prevention.

CONFLICT OF INTEREST: The authors declare that there is no conflict of interest.

SPONSORS OF THE STUDY: Nil

SOURCES OF FUND: The study is not funded by any external sources and expenses were borne by the investigators.

STATISTICS:

- A descriptive statistics is use for to assess the mean frequency and percentage.
- Inferential statistics like chi squire test use to find the association.

RESULT:

Table-1 Represent the Frequency and percentage distribution of samples, according to their demographic characteristics. It was observed that among 60 people, The 3 (5%) belongs to age group of 18-20 years, 21 (35%) belongs to age group of 21-30 years, 19 (31.67%) belongs to the age group of 31-40 year and 17 (28.33%) belong to the age group of 41-50 years. In gender the 28 (46.67%) have males and 32 (53.33%) have females and in religion the 41 (68.33%) are Hindus, 7 (11.67%) are Muslims, 2 (3.33%) are Christian, and 10 (16.67%) are others, In family type 29 (48.33%) belongs to nuclear family, 31 (51.67%) belongs to joint family, in monthly income 12 (20%) belong to below 10,000 income of the family , 13 (21.67%) belongs to the 10,000-20,000

income of the family, 15 (25%) belongs to the 20,00-30,000 income of the family and 20 (33.33%) belongs to the above 30,000 income of the family and in occupation 6 (10%) belong to Unemployed, 7 (11.67%) belong to Agriculture occupation, 15 (25%) belongs to business occupation, 23 (38.33%) belong to the laborer occupation and 9 (15%) belong to any other occupation.

Table 2: The result showed, 2 respondents (3.33%) have inadequate knowledge, 41 respondents (68.33%) have moderate knowledge and 17 (28.33%) have adequate knowledge regarding COVID-19. The mean score for level of knowledge is 18.07 and standard deviation is 4.954.

Table 3: The result showed that the calculated X^2 values was less than table values in term of Age, Gender, religion, family type, income and occupation of subjects, Hence the research hypothesis H_0 stated that there is no significant relation to the socio demographic variable was accepted.

Table 1: Socio-demographic characteristics of the participants

| Variables | Categories | Frequency(N) | Percentage (%) |
|-----------|-------------------|--------------|----------------|
| Age | a.18-20 years | 3 | 5 |
| | b. 21-30 years | 21 | 35 |
| | c. 31-40 years | 19 | 31.67 |
| | d. 41-50 years | 12 | 20.0 |
| | E. above 50 years | 5 | 8.3 |
| Gender | a.Male | 28 | 46.67 |
| | b.Female | 32 | 53.33 |
| Religion | a.Hindu | 41 | 68.33 |
| | b. Muslim | 7 | 11.67 |
| | c.Christian | 2 | 3.33 |
| | d.Others | 10 | 16.67 |

| | | | |
|----------------|------------------|----|-------|
| Family Type | a.Nuclear | 29 | 48.33 |
| | b.Joint | 31 | 51.67 |
| Monthly Income | a.Below 10,000 | 12 | 20 |
| | b.10,000-20,000 | 13 | 21.67 |
| | c. 20,000-30,000 | 15 | 25 |
| | d. Above 30,000 | 20 | 33.33 |
| Occupation | a. Unemployed | 6 | 10 |
| | b. Agriculture | 7 | 11.67 |
| | c. Business | 15 | 25 |
| | d. Laborer | 23 | 38.33 |
| | e. Any other | 9 | 15 |

Table 2: Distribution of subjects according to level of knowledge regarding COVID-19

| Level of Knowledge | Scores | N=60 | | | |
|----------------------|--------|-----------|------------|-------|-------|
| | | Frequency | Percentage | Mean | SD |
| Inadequate Knowledge | <10 | 3 | 5.0 | 18.07 | 4.954 |
| Moderate Knowledge | 10-20 | 40 | 66.77 | | |
| Adequate Knowledge | >20 | 17 | 28.33 | | |
| Total | | 60 | 100 | | |

Table 3 Data on association between knowledge score and demographic variable

| Demographic variable | Category | Knowledge level | | | Total | df | Chi-score | Interference |
|----------------------|---------------|-----------------|----------|----------|-------|----|--------------------|--------------|
| | | Inadequate | Moderate | Adequate | | | | |
| Age in year | 18-20 years | 0 | 1 | 2 | 60 | 8 | 5.953 | NS |
| | 21-30 years | 1 | 15 | 5 | | | | |
| | 31-40 years | 1 | 11 | 7 | | | | |
| | 41-50 years | 1 | 8 | 3 | | | | |
| | 50years above | 0 | 5 | 0 | | | | |
| Gender | Male | 2 | 19 | 7 | 60 | 2 | 0.699 ^a | NS |
| | Female | 1 | 21 | 10 | | | | |
| Religion | Hindu | 1 | 27 | 13 | 60 | 6 | 3.702 ^a | NS |
| | Muslim | 1 | 5 | 1 | | | | |
| | Christian | 0 | 1 | 1 | | | | |
| | Others | 1 | 7 | 2 | | | | |
| Family type | Nuclear | 0 | 20 | 9 | 60 | 2 | 2.995 ^a | NS |
| | Joint | 3 | 20 | 8 | | | | |
| Monthly income | Below 10,000 | 1 | 6 | 5 | 60 | 6 | 3.393 ^a | NS |
| | 10,000-20,000 | 1 | 9 | 3 | | | | |
| | 20,000-30,000 | 0 | 12 | 3 | | | | |
| | Above 30,000 | 1 | 13 | 6 | | | | |
| Occupation | Unemployed | 1 | 2 | 3 | 60 | 8 | 6.558 ^a | NS |
| | Agriculture | 0 | 5 | 2 | | | | |
| | Business | 1 | 11 | 3 | | | | |
| | Laborer | 0 | 16 | 7 | | | | |
| | Any other | 1 | 6 | 2 | | | | |

DISCUSSION

A descriptive approaches is adapted to a study for the preparedness of urban

population towards covid 19.

The findings for the study are discussed under the following heading:

Section I- Analysis of socio demographic characteristics of respondents.

Section II- Assessment of knowledge score of urban population regarding covid 19.

Section III- Associated between knowledge score and socio demographic variables.

Section I: Analysis of socio demographic characteristics of respondents.

Age in years: The 3 respondents (5%) belongs to age group of 18-20 years, 21 respondents (35%) belongs to age group of 21-30 years, 19 respondents (31.67%) belongs to the age group of 31-40 year, 17 respondents (28.33%) belong to the age group of 41-50 years and 5 respondents (8.3%) belongs to age group above 50 years.

Gender: The 28 respondents (46.67%) have males and 32 respondents (53.33%) have females.

Religion: The 41 respondents (68.33%) are Hindus, 7 respondents (11.67%) are Muslims, 2 respondents (3.33%) are Christian, and 10 respondents (16.67%) are others.

Family type: The 29 respondents (48.33%) belongs to nuclear family, 31 respondents (51.67%) belongs to joint family.

Income: The 12 respondents (20%) belong to below 10,000 income of the family , 13 respondents (21.67%) belongs to the 10,000-20,000 income of the family, 15 respondents

(25%) belongs to the 20,00-30,000 income of the family and 20 respondents(33.33%) belongs to the above 30,000 income of the family.

Occupation: The 6 respondents (10%) belong to Unemployed, 7 respondents (11.67%) belong to Agriculture occupation, 15 respondents (25%) belongs to business occupation, 23 respondents (38.33%) belong to the laborer occupation and 9 respondents (15%) belong to any other occupation.

Section II: Assessment of knowledge score of urban population regarding covid-19.

The result shows that mean knowledge score of urban population is 18.07 Median is 18 and S.D is 4.954. Assessment of knowledge performance showed following results.

- Adequate knowledge :17(28.333%) participants has adequate knowledge.
- Moderate knowledge: 40(66.77%) participants has moderately adequate knowledge.
- Inadequate knowledge: 3(5%) participants has inadequate knowledge.

Section III: Associated between knowledge score regarding COVID-19 sociodemographic variables.

There is demographic variables such as age, gender, religion, type of family, monthly income and occupation The study revealed that non-significant association is found

between knowledge regarding COVID-19 with age, gender, religion, type of family, monthly income and occupation

CONCLUSION:

The present study among urban general population resulted revealed that the magnitude of preparation for COVID-19 is on rise in urban areas. The prevalence of the COVID-19 increase in urban population because of the considerable disparity in availability and affordability of COVID-19 as well as low awareness of COVID-19 it is high time to give attention to the people in urban areas of vadodara city. Hence, there is need to create awareness about prevention of COVID-19 and accessibility to health care services

CONFLICT OF INTEREST: The author declares that there is no any conflict of interest.

ETHICAL CLEARANCE: As the study conducted on humans ,approval from institutional ethical committee was obtained commencement of the study.

REFERENCES

- [1] MoHFW: ministry of health and family welfare, Govt. of India, www.mohfw.gov.in
- [2] WHO: World health organization: Geneva, switzerland : Emenrgency coronavirus disease (COVID-19) pandemic, India www.who.int.
- [3] WHO: World health organization, Geneva MIDDLE EAST respiratory syndrome coronavirus (MERS-CoV), (SARS-CoV)www.who.int. Accessed 12th march, 2020.
- [4] National health portal of India. Gateway to authentic health information. Update on novel corona virus outbreak retrived from: nhp.gov.in accessed on 20th march 2020
- [5] India times, Economic times. “corona virus in Gujarat” published on 20th march 2020. Page no. 1
- [6] Vadodra Municipal Corporation: Vadodara, Gujarat, India, “gujarat fights covid-19”
Accessed on: www.vmc.gov.in.
- [7] Times of india, Baroda times. Vadodara, Gujarat state Report: 10thapril 2020: 17 new covid-19 positive cases -39 total in Vadodara and red-zone area declaration by Vadodara mayor. Page no. 1
- [8] World-o-meter: “Total corona virus cases in india, statistical representation” 10thapril 2020: www.worldometer.info.
- [9] Bai Y, Yao L, Wei T, *et al*. Presumed Asymptomatic Carrier Transmission of COVID-19. *JAMA*. 2020;323(14):1406–1407. doi:10.1001/jama.2020.2565

- [10] WIKIPEDIA: Indian local government response to the 2020 coronavirus pandemic assessed on 9th april, 2020. https://en.m.wikipedia.org/wiki/Indian_local_government_response_to_the_2020_coronavirus_pandemic
- [11] Wasserman S, Messina. “Infection prevention and safety” Bearman G. Chapter 16: Bundles in Infection Prevention and Safety. Guide to infection control in the hospital. Wasserman S, Messina A, Authors. International Society for Infectious Diseases; 2018. Accessed 12 October 2019
- [12] NASIR, M. U., ROBERTS, J., Muller, N. L., Macri, F., Mohammed, M. F., Akhlaghpoor, S., Nicolaou, S. (2020). The Role of Emergency Radiology in COVID-19: From Preparedness to Diagnosis. *Canadian Association of Radiologists Journal*.
- [13] YUDONG SHI, Juan Wang, Yating Yang, Zhiqiang Wang, Guoqing Wang, Kenji Hashimoto, Kai Zhang, HuanzhongLiu, Knowledge and attitudes of medical staff in Chinese psychiatric hospitals regarding COVID-19, *Brain, Behavior, & Immunity - Health*, Volume 4, 2020, 100064, ISSN 2666-3546, Received 21 March 2020.
- [14] Bai Y, Yao L, Wei T, et al. Presumed Asymptomatic Carrier Transmission of COVID-19. *JAMA*. 2020; 323(14):1406–1407. doi:10.1001/jama.2020.2565.
- [15] National health portal of India. www.nhp.gov.in
- [16] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7832348/#B13>
- [17] [Population-Level Preparedness About Preventive Practices Against Coronavirus Disease 2019: A Cross-Sectional Study Among Adults in Bangladesh \(nih.gov\)](#)
- [18] [Population-Level Preparedness About Preventive Practices Against Coronavirus Disease 2019: A Cross-Sectional Study Among Adults in Bangladesh \(nih.gov\)](#) "Novel coronavirus named 'Covid-19': WHO". Today. Singapore. Archived from the original on 21 March 2020. Retrieved 11 February 2020
- [19] World Health Organization. Pandemic influenza preparedness and response: A WHO guidance document. Geneva: WHO; 2009.
- [20] Centres for Disease Control and Prevention. Past pandemics. Available from: <https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html>, accessed on March 27, 2020.
- [21] Singhal T. A Review of Coronavirus Disease-2019 (COVID-19) *Indian J*

Pediatr. 2020;**87**:281–286.

doi: 10.1007/s12098-020-03263-6. [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]

- [22] Cascella M., Rajnik M., Cuomo A., Dulebohn S.C., Di Napoli R. *StatPearls*. StatPearls Publishing; Treasure Island, FL, USA: 2020. Features, Evaluation and Treatment Coronavirus (COVID-19) [[Google Scholar](#)]
- [23] Adhikari S.P., Meng S., Wu Y.J., Mao Y.P., Ye R.X., Wang Q.Z., Sun C., Sylvia S., Rozelle S., Raat
- [24] H., *et al.* Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: A scoping review. *Infect. Dis. Poverty*. 2020; **9**: 29. doi: 10.1186/s40249-020-00646-x. [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]