

Volume 2; Issue 5; September-October 2021; Page No. 451-454

A descriptive study regarding ambulant screening during COVID-19 pandemic among adults

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Abstract

COVID-19 is a disease caused by way of a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disorder used to be referred to as '2019 novel coronavirus. 'The COVID-19 virus is a new virus linked to the identical family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold. Virus is transmitted through direct contact with respiratory droplets of an infected person. Individuals can also be infected from and touching surfaces contaminated with the virus and touching their face. The present aim of the study was to assess the knowledge on covid-19 pandemic among adults at ambattur estate. A quantitative approach with descriptive research design was adopted for the present study.

100 male and female adults were selected by using nonprobability purposive sampling technique. A self –structured method questionnaire was used to collect both the demographic data and the existing level of knowledge on covid-19 pandemia among adults. Among 100 adults, maximum score of existing level of knowledge on covid-19 pandemia among adults was found to be 30.0 and mean score 19.72 with standard deviation 4.09. Around 53(53.0%) of adults had moderate level of knowledge on Corona virus hence the findings of present study concluded that, the knowledge among adults on covid-19 pandemia should be improved to knowledge and skills and to provide safety.

Keywords: Regarding ambulant screening, covid-19, description study, knowledge, adults

Introduction

Covid- 19 is a disease caused by way of a new strain of corona virus. Formerly, the covid-19 is a New virus linked to the identical family of viruses as severe acute respiratory syndrome and some types of common cold ^[1].

Covid-19 is the name given by the world health organization WHO on February 11 2020 for the disease caused by the novel corona virus SARS-COV2. The virus is transmitted via direct contact with respiratory droplets of an infected individual (generated through coughing and sneezing). Individuals can also be infected from and touching surfaces contaminated with the virus and touching their face (eyes, nose, mouth)^[1].

Most of the early cases were epidemiologically linked to the Huanan seafood wholesale market where aquatic animals and live animals were sold ^[9] Using unbiased next generation sequencing, an unknown beta coronavirus was discovered from lower respiratory tract samples of these patients. Human airway epithelial cells were used to isolate the virus that was named 2019-novel corona ^[10].

The virus when observed under electron microscope had a diameter of 60 to 140 nm with characteristic spikes of 9 to 12 nm, similar to the Coronoviridae family ^[10]. Zoonotic transmission initially appeared to be a plausible cause as majority of early cases had a history of exposure to wet markets ^[9]. They are enveloped, positive-sense, single-stranded RNA viruses which were first isolated from humans ^[8].

Covid-19 infection has an incubation period of 1-14 days, mostly 3-7 days 97.5% of affected person specific symptoms inside 11.5 days ^[4, 5].

The rate of contamination and patterns of transmission is threatening the whole mankind. Pandemic is the outbreak of a sickness that occurs over a extensive geographic area and affected an usually I proportion of the population and pandemic outbreak of a disease ^[13].

Covid -19 screening and surveillance that asymptomatic transmission is an important component of the pandemic, using tests for screening and surveillance could play an important role in slowing or preventing the spread of disease ^[25].

Ambulatory patients in good general state of health consistent with an emergency severity Index score of 4 or 5 were screened for covid-19 by taking yeah a nasopharyngeal swab and performing PCR analysis the screening was performed according to the following criteria recommended by the Swiss federal health employer ^[24].

The severity of Covid-19 signs and symptoms can range from mild to severe. Some human beings may additionally have only a few symptoms, and some human beings may additionally moreover also have no sign and symptoms of all. Some human beings may also experience worsened symptoms, such as worsened shortness of breath and pneumonia, about a week after signs and symptoms and signs begin ^[14].

- Weakened immune system from solid organ transplants
- Pregnancy
- Asthma
- Chronic lung diseases such as cystic fibrosis or pulmonary fibrosis
- Liver disease
- Dementia
- Down syndrome
- Weakened immune system from bone marrow transplant, HIV or some medications ^[29].

At home coronavirus treatment are rest, It can make you feel better and may speed your recovery. Drink fluids. You lose greater water when you're sick. Dehydration can make signs and symptoms worse and reason different health problems. Cover your coughs and sneezes with a tissue or your elbow wear a mask over your nose and mouth if you c check the levels of oxygen in your blood with a clip-on finger monitor [31].

2. Methods and Materials

The quantitative approach with descriptive research design was adopted for the present study. Legal and social obligation to the study participation. After obtaining ethical clearance from the Institutional Ethical Committee (IEC) of Saveetha Institute of Medical And Technical Sciences and a formal permission form the health authorities. A total of 100 adults both males and females who meet the inclusion criteria was selected by non-probability convenience sampling techniques. The inclusion criteria for the study participants were the adults who are willing to participate in the study, who are between the age of 18 to 25 years, who are able to speak and read Tamil and English and who are available during the time of data collection. The exclusion criteria for the study participants were who are not willing to participate in the study, who are not available during the study period. The purpose of the study was explained investigator to each of the study participants and a written consent was obtained from them. The demographic variables and the existing level of knowledge was collected by using the self-structured questionnaire and the duration of 30 minutes was given for completing the questionnaire. The collected data were tabulated and analyzed by using descriptive and inferential statistics.

3. Results

Section-A: demographic characteristics

Among 100 adults, most of the adults 86(86.0) were aged between 20 to 22 years, 54(54.0) were males, 85 (85.0) had government occupations, 64 (64.0) were urban areas, 64

(64.0) were nuclear family.

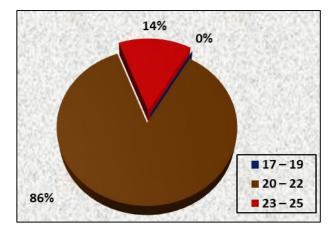


Fig 1: Percentage distribution of age of the adults

Section B: Assessment of level of knowledge on ambulant screening during covid19 pandemic among adults

The assessment of level of knowledge on covid-19 pandemia among adults revealed that 53(53.0%) had moderate knowledge, 30(30.0%) had adequate knowledge and 17(17.0%) had inadequate knowledge [Table 1 and Figure 1]. The mean score of knowledge scores on covid19 was 19.72 with standard deviation 4.09 with minimum score of 10.0 and maximum score of of 30.0 [Table 2].

 Table 1: Frequency and percentage distribution of level of knowledge about Covid-19 among adults N = 100

Level of Knowledge	No.	%
Inadequate (≤50%)	17	17.0
Moderate (51 – 75%)	53	53.0
Adequate (>75%)	30	30.0

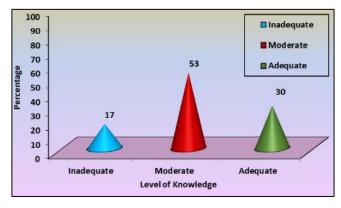


Fig 2: Percentage distribution of level of knowledge about Covid-19 among adults

Table 2: Assessment of knowledge scores about Covid-19 among
adults N = 100

Knowledge	Scores		
Minimum Score	10.0		
Maximum Score	30.0		
Mean	19.72		
Standard Deviation	4.09		

The table 3 depicts that the mean score of knowledge scores about Covid-19 among adults was 19.72 with standard deviation 4.09 with minimum score of 10.0 and maximum score of 30.0.

These findings were supported by a similar study conducted

by Anjalu devi shrama, kavitha verma Manisha shegal, Yachna verma, Anupama.k (2020), a descriptive study to assess the knowledge of Corona virus Results: The result of the study revealed that only 31.7% of students had good knowledge about COVID-19, and 68.3% had average knowledge. The minimum and maximum score achieved by the nursing students was 9 and 23 respectively. The average score was 14.42 with \pm 3.4 standard deviation. The study concluded that nursing students has no enough knowledge and there was no one with poor knowledge 68.3% were with average knowledge on Corona virus disease.

Section C: Association of level of knowledge with selected demographic variables.

The findings of the analysis revealed demographic variable education had shown statistically significant association with level of knowledge on covid-19 pandemia among adults at p<0.05 level and the other demographic variables had not shown statistically significant association with level of knowledge on covid-19 pandemia among adults [Table 3].

Demographic Variables	Inadequate		Moderate		Adequate		Chi Garaga and
	No.	%	No.	%	No.	%	Chi-Square value
Age							$\chi^2 = 2.372$
17 - 19	-	-	-	-	-	-	d.f=2
20 - 22	16	16.0	43	43.0	27	27.0	p = 0.305
23 - 25	1	1.0	10	10.0	3	3.0	N.S
Sex							χ ² =0.642
Male	9	9.0	27	27.0	18	18.0	d.f=2
Female	8	8.0	26	26.0	12	12.0	p = 0.725 N.S
Occupation							$\chi^2 = 0.368$
Private	2	2.0	9	9.0	4	4.0	d.f=2
Government	15	15.0	44	44.0	26	26.0	p = 0.832
Other	-	-	-	-	-	-	N.S
Living area							χ ² =0.395
Rural	5	5.0	20	20.0	11	11.0	d.f=2
Urban	12	12.0	33	33.0	19	19.0	p = 0.821 N.S
Type of family			_				χ ² =0.736
Nuclear	10	10.0	33	33.0	21	21.0	d.f=2
Joint	7	7.0	20	20.0	9	9.0	p = 0.692 N.S

Table 3: Association of level of knowledge about Covid-19 among adults with their selected demographic variables N = 100

N.S - Not Significant

4. Discussion

This chapter deals with analysis and interpretation of the data collected from 100 adults. The data was organized, tabulated and analyzed according to the objectives. The findings are presented under the following sections. The COVID-19 pandemic and subsequent countrywide lockdown measures have affected all aspects of our social and economic lives. The study used quantitative research approach and descriptive research design was adopted for the study. The sample size of the study was 100 adults who were selected by non-probability convenient sampling technique and who fulfilled the inclusion criteria. The study was conducted at Chennai-Ambattur Estate. A structured self-interview questionnaire was used to assess the knowledge about covid-19 among adults. It has 30 questions, for the correct answer, the score was given as 1 and for the wrong answer the score was given 0 the total score was given 30. The data was collected for a period of 1 week and the collected data were analyzed using descriptive and inferential statistics. The findings of the analysis show that none of the demographic variables had shown statistically significant association with level of knowledge about Covid-19 among adults with their selected demographic variables.

5. Conclusion

The analysis revealed that majority of the majority of the adults had moderate knowledge on Covid-19 so the adults should be educated on the knowledge and impact of Covid-19 pandemic.

6. Acknowledgement

Authors would like to appreciate all the study participants for their co-operation to complete the study successfully.

7. Conflict of Interest

Authors declare no conflict of interest.

8. Funding Support

None.

References

- 1. Kerbl R. COVID-19: key massage and action for Covid -19 prevention and control in school, Masken für kinder? Eine einschätzung von UNICEF und WHO. Monatsschrift Kinderheilkunde. 2020a; 169(2):97-98. https://doi.org/10.1007/s00112-020-01086-5
- Sophie vergbaud. Access to this page has been denied WHO, 2020. https://www.goodrx.com/blog/what-doescovid-19-mean-who-named-it/
- Coronavirus disease (COVID-19) Situation Report-66, WHO, 2019. Available at:https://www.who.int/docs/defaultsource/coronaviruse/situation reports/20200326-sitrep-66-covid19.pdf?sfvrsn=81b94e61_COVI
- 4. Guo YR, Cao QD, Hong ZS, Tan YY, Chen SD, Jin HJ, *et al.* The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak-an update on the status. Military Med Res. 2020; 7(1):1.
- 5. Lauer SA, Grantz KH, Bi Q, Jones FK, Zheng Q,

Meredith HR, *et al.* The incubation period of coronavirus disease 2019 (COVID-19) from publicly reported confirmed cases: estimation and application. Ann Intern Med. 2020; 172(9):577-82.

- Guidelines on Clinical Management of COVID-19, Government of India Ministry of Health and Family Welfare Directorate General of Health Services.Availableat:https://www.mohfw.gov.in/pdf/Re visedNationalClinicalManagementGuidelineforCOVID 1931032020.pdf.
- World Health Organization. Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected: interim guidance. World Health Organization, 2020. Available at: https://apps.who. int/iris/handle/10665/331446.
- 8. Tyrrell DA, Bynoe ML. Cultivation of viruses from a high proportion of patients with colds Lancet 19661(7428)76-77. [PubMed] [Google Scholar] [Ref list].
- Li Q, Guan X, Wu P. Early transmission dynamics in Wuhan, China, of novel Coronavirus-infected pneumonia. N Engl J Med. 2020; 382(13):1199-1207. [PMC free article] [PubMed] [Google Scholar] [Ref list].
- Zhu N, Zhang D, Wang W. China Novel Coronavirus Investigating and Research Team. A novel Coronavirus from patients with pneumonia in China. N Engl J Med. 2019-2020; 382(08):727-733. [PMC free article] [PubMed] [Google Scholar] [Ref list].
- Ralp R, Lew J, Zeng T. 2019-nCoV (Wuhan virus), A novel Coronavirus: human-to-human transmission, travel-related cases, and vaccine readiness. J Infect Dev Ctries. 2020; 14(01):3-17. [PubMed] [Google Scholar] [Ref list].
- 12. Chan JFW, Yuan S, Kok KHA. Familial cluster of pneumonia associated with the 2019 novel Coronavirus indicating person-to-person transmission: a study of a family cluster Lancet 2020395(10223)514-523. [PMC free article] [PubMed] [Google Scholar] [Ref list].
- Jarus O. Twenty worst pandemics in the world.[Internet.] 2020. [updated 2020 May; cited 2020 May 15]. Available from http://:livemedicine.com/worstepidemicsand-pandemics-in-history.html.
- Coronavirus disease 2019 (COVID-19)-Symptoms and causes. (2021, June 2). Mayo Clinic. https://www.mayoclinic.org/diseasesconditions/coronavirus/symptoms-causes/syc-20479963
- US Coronavirus Map: Tracking the Trends. 2021. Mayo Clinic. https://www.mayoclinic.org/coronavirus-covid-19/map
- Faridi S, Niazi S, Sadeghi K. A field indoor air measurement of SARS-CoV-2 in the patient rooms of the largest hospital in Iran. Sci Total Environ. 2020; 725:138401-138401. [PMC free article] [PubMed] [Google Scholar] [Ref list].
- Wong SCY, Kwong RTS, Wu TC. Risk of nosocomial transmission of coronavirus disease 2019: an experience in a general ward setting in Hong Kong J Hosp Infect. 2020. S0195-67012030174–30174. [PMC free article] [PubMed] [Google Scholar] [Ref list].
- Park M, Cook AR, Lim JT, Sun Y, Dickens BL. A systematic review of COVID-19 epidemiology based on current evidence. J Clin Med. 2020; 9(04):E967-E967.
 [PMC free article] [PubMed] [Google Scholar] [Ref list].
- 19. To KKW, Tsang OTY, Leung WS. Temporal profiles of

viral load in posterior oropharyngeal saliva samples and serum antibody responses during infection by SARS-CoV-2: an observational cohort study Lancet Infect Dis 2020; S1473-30992030196–1. [PMC free article] [PubMed] [Google Scholar] [Ref list].

- Liu Y, Yan L-M, Wan L. Viral dynamics in mild and severe cases of COVID-19 Lancet Infect Dis 2020(e): S1473-30992030232–2. [PMC free article] [PubMed] [Google Scholar] [Ref list].
- Wu Y, Guo C, Tang L. Prolonged presence of SARS-CoV-2 viral RNA in faecal samples. Lancet Gastroenterol Hepatol. 2020; 5(05):434-435. [PMC free article] [PubMed] [Google Scholar] [Ref list].
- 22. WHO. Laboratory testing for coronavirus disease (COVID-19) in suspected human cases. Interim Guidance, 2019, 1–7.
- Zitek T. The appropriate use of testing for COVID-19.West J Emerg Med. 2020; 21(3):470-472. Wang W, Xu Y, Gao R, *et al.* Detection of SARS-CoV-2in different types of clinical specimens. JAMA. 2020; 323(18):1843-1844.
- 24. https://www.bag.admin.ch/bag/de/home/krankheiten/au sbrueche-epidemien-pandemien/aktuelle-ausbruecheepidemien/novel-cov/besonders-gefaehrdetemenschen.html.
- 25. Andrea prized, MPH, SM is actively pursuing her Ph.D. (2020, December 7). Screening Versus Diagnostic Tests for COVID-19, What's the Difference? American Society for Microbiology.Org. https://asm.org/Articles/2020/December/Screening-Versus-Diagnostic-Tests-for-COVID-19,-Wh
- 26. Sudipta Dhar Chowdhury, Anu Mary Oommen. NCBI-WWW Error Blocked Diagnostic. Journal of Digestive Endoscopy in Covid-19, 2020. https://misuse.ncbi.nlm.nih.gov/error/abuse.shtml#OR_ 26
- Guan WJ, Ni ZY, Hu Y, *et al.* Clinical Characteristics of Coronavirus Disease 2019 in China. N Engl J Med. 2020; 382:1708-1720. Doi: 10.1056/NEJMoa2002032external icon.
- Li Q, Guan X, Wu P, *et al*. Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia. N Engl J Med. 2020; 382:1199-207. Doi: 10.1056/nejmoa2001316external icon.
- 29. Lauer SA, Grantz KH, Bi Q, *et al.* The Incubation Period of Coronavirus Disease 2019 (COVID-19) From Publicly Reported Confirmed Cases: Estimation and Application. Ann Intern Med. 2020; 172(9):577-82. Doi: 10.7326/M20-0504external icon.
- 30. Neha Pathak. Coronavirus and COVID-19: What You Should Know. Web MD, 2013. https://www.webmd.com/lung/coronavirus.
- 31. Imsanali, Omar ML Alharbi. COVID-19: Disease, management, treatment, and social impact. PubMed Central (PMC), 2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC71759 09/