

The 26 C's of Covid-19 that any laymen must know.

1. Dr Alok Dubey*

*Associate Professor, Department Of Preventive Dental Sciences,
 College Of Dentistry, Jazan University, Jizan, K.S.A.

2. Dr. Sheetal Mujoo**

**Assistant Professor, Department Of Oral Medicine And Radiology,
 College Of Dentistry, Jazan University, Jizan, K.S.A.

Corresponding Address: Dr Alok Dubey,
 College Of Dentistry, Jazan University, Jizan, K.S.A. Po Box: 114, Postal Code: 45142

Date of Submission: 28-11-2020

Date of Acceptance: 13-12-2020

The current outbreak of the novel coronavirus SARS-CoV-2 epi-centred in Hubei Province of the People's Republic of China has spread to many other countries. On 30th January 2020, the WHO Emergency Committee declared global health emergency based on growing case notification rates at Chinese and international locations¹.

The National Health Commission of the People's Republic of China has reported that as of February 24, 2020, a total of 3387 of 77,262 patients with Covid-19 (4.4%) in China were health care workers or others who worked in medical facilities².

General public must be made aware of the mode of transmission, presenting symptoms and the measures that can be undertaken to prevent spread of infection. I have tabulated all the facts of this disease and interestingly most of the required information about this disease begins with the letter C (Table 1).

The 'must know' about the virus in the tabulated manner can be displayed in public places like hospitals and malls. The inhabitants cango through the information provided and easily remember them as all the information provided goes well with the letter 'C'

Table 1: Must know C's of Covid-19 infection.

HEADING	ASSOCIATED C'S	DESCRIPTION
ORIGIN	<i>China</i>	The virus originated in bats and was transmitted to humans through yet unknown intermediary animals in Wuhan, Hubei province, China in December 2019 ³ .
TRANSMISSION	<i>Contact transmission</i>	The common transmission route of coronavirus is contact transmission (contact with oral, nasal & eye mucous membranes) ⁴ .
COMMON SYMPTOM	<i>Cough, Congestion</i>	Common presentations of confirmed cases include fever, fatigue, dry cough, upper airway congestion, sputum production, shortness of breath, myalgia/arthralgia ³ .
LESS COMMON SYMPTOM	<i>Conjunctivitis</i>	Conjunctivitis can be the only symptom of COVID-19 ⁶ .
SEVERE SYMPTOMS	<i>Co morbidities</i>	Underlying comorbidities (hypertension, diabetes, coronary heart disease, chronic obstructive pulmonary disease) may be associated with Major complications during hospitalization like ARDS, arrhythmia and shock ⁵ .
LABORATORY FINDING	<i>CRP</i>	Common laboratory findings include normal/ low white cell counts with elevated C-reactive protein (CRP) ³ .
	<i>Cytokines</i>	The progression of disease is associated with extreme rise in inflammatory cytokines including IL2, IL7, IL10, GCSF, IP10, MCP1, MIP1A, and TNF α ³ .
RADIOGRAPHIC FINDING	<i>Chest X ray</i>	The chest X-ray (CXR) usually shows bilateral infiltrates but may be normal in early disease ³ .
	<i>CT Scan</i>	CT imaging shows infiltrates, ground glass opacities and subsegmental consolidation. It is also abnormal in asymptomatic patients/ patients with no clinical evidence of lower respiratory tract involvement. In fact, abnormal CT scans have been used to diagnose COVID-19 in suspect cases with negative molecular diagnosis ³ .
	<i>Contact tracing</i>	Contact tracing can reduce transmission ⁷ .

PREVENTION	<i>Confinement</i>	Confinement/Isolation is to prevent transmission to other contacts, patients and healthcare workers ³ .
	<i>Cough hygiene</i>	Covering coughs and sneezes with tissues that are then safely disposed of (or, if no tissues are available, use a flexed elbow to cover the cough or sneeze); may reduce the risk of exposure ⁷ .
	<i>Cooperation, Compliance, Curfew</i>	All should cooperate with health authority, comply with the orders from state and take curfew and lock down measures seriously.
	<i>Circumvent</i>	Avoid <i>Closed spaces</i> with poor ventilation, <i>Crowded places</i> , <i>Close range Conversations</i> and <i>Closed Contact setting</i> .
MANAGEMENT	<i>Corticosteroid</i>	Systemic corticosteroid treatment commonly used in clinical practice previously for influenza virus are invalid for COVID-19 and not recommended ⁸ .
	<i>Chloroquinine</i>	Chloroquine can inhibit pH-dependent steps of the replication of several viruses with a potent effect on SARS-CoV infection and spread. Moreover, chloroquine has immunomodulatory effects, suppressing the production/release of TNF- α and IL-6. It also works as a novel class of autophagy inhibitor, which may interfere with viral infection and replication ⁸ .
	<i>Chinese medicine</i>	Clinicians combined Chinese and Western medicine and have gained significant improvement in pneumonia associated symptoms in Shanghai Public Health Clinical Center, China ⁸ .
	<i>Vitamin C</i>	IV Vitamin-C has effect on the immune system response and the antioxidant properties of IV Vit-C specifically addresses the cytokines' storm ⁹ .

The local population need to be well informed of the disease. I have made an attempt to provide information to laymen in a lucid manner. Together we can bring a sea of change in mankind existence.

References:

- [1]. Velavan TP, Meyer CG. The COVID-19 epidemic. *Trop Med Int Health*. 2020;25(3):278-280. doi:10.1111/tmi.13383
- [2]. Zhan M, Qin Y, Xue X, Zhu S. Death from Covid-19 of 23 Health Care Workers in China [published online ahead of print, 2020 Apr 15]. *N Engl J Med*. 2020;NEJMc2005696. doi:10.1056/NEJMc2005696
- [3]. Singhal T. A Review of Coronavirus Disease-2019 (COVID-19). *Indian J Pediatr*. 2020;87(4):281-286. doi:10.1007/s12098-020-03263-6
- [4]. Dubey A. Avoid "MEN" to Avoid 2019-nCoV Infection in Dental Practice. *ES J Clin Med*. 2020; 1(3): 1014.
- [5]. Chan KW, Wong VT, Tang SCW. COVID-19: An Update on the Epidemiological, Clinical, Preventive and Therapeutic Evidence and Guidelines of Integrative Chinese-Western Medicine for the Management of 2019 Novel Coronavirus Disease. *Am J Chin Med*. 2020;48(3):737-762. doi:10.1142/S0192415X20500378
- [6]. Scalinci SZ, Trovato Battagliola E. Conjunctivitis can be the only presenting sign and symptom of COVID-19. *IDCases*. 2020;20:e00774.
- [7]. Adhikari SP, Meng S, Wu YJ, 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(1):29. Published 2020 Mar 17. doi:10.1186/s40249-020-00646-x
- [8]. Guo YR, Cao QD, Hong ZS, et al. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak - an update on the status. *Mil Med Res*. 2020;7(1):11. Published 2020 Mar 13. doi:10.1186/s40779-020-00240-0
- [9]. Boretti A, Banik BK. Intravenous vitamin C for reduction of cytokines storm in acute respiratory distress syndrome. *PharmaNutrition*. 2020 Jun;12:100190. doi: 10.1016/j.phanu.2020.100190. Epub 2020 Apr 21. PMID: 32322486; PMCID: PMC7172861.

Dr ALOK DUBEY, et. al. "The 26 C's of Covid-19 that any laymen must know." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 19(12), 2020, pp. 55-56