

Deaths due to COVID-19 in Affected Countries

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A new coronavirus called as novel coronavirus was first emerged in Wuhan, Hubei province of China, at the end of 2019. This was labelled as 2019-nCoV. A first patient of pneumonia of unknown cause was detected in Wuhan, China. The case was reported to the World Health Organization (WHO) Country Office in China on 31 December 2019. Subsequently, the outbreak was declared a Public Health Emergency of International Concern on January 30, 2020. WHO announced a name for the new coronavirus disease, COVID-19 on February 11, 2020. When COVID-19 infection reported from 114 countries then WHO declared COVID-19 infection, a global pandemic on March 11, 2020. Till the writing of this article April 2, 2020, the COVID-19 affected 200 countries and territories around the world and 2 international conveyance (the Diamond Princess cruise ship harbored in Yokohama, Japan and the Holland America's MS Zaandam cruise ship)^{1,2,3,4}.

Initially, the epicenter was China, later on it was shifted to Italy, then Spain and now epicenter is United States of America. Deaths reported from various countries are varied relative to total new cases reported. The pandemic is very rapidly accelerating. The first case was reported on Dec 31, 2019; 1st one lac cases in 67 days, 2nd in 11 days, 3rd in 4 days, 4th in 3 days, 5th in 2.5 days, 6th in 2 days and 7th 2 days and 8th 1.5 days and 9th in one day⁵.

We retrieved the secondary data of countries those reported more than 1000 new cases of COVID-19 until 13.36 Greenwich Mean Time March 30, 2020 from worldmeter website. <https://www.worldometers.info/coronavirus/>. (Table 1). Forty-two countries reported more than 1000 cases. In 18 countries first case was reported in January, 17 countries reported their first case in February while 7 in March⁴. The data related to total new cases and total deaths were entered into IBM Statistical Package for the Social Sciences version 21 and percentage of death was calculated. The highest number of cases reported from United States of America 142,793 while lowest from Iceland 1,020 among 42 countries. The maximum deaths were reported from Italy 10,779 while lowest from South Africa and Iceland i.e. 2 from each country. (Table 1, Figure 1 and 2) The percentage of deaths was highest among patients of Italy while lowest in Iceland among 42 countries.

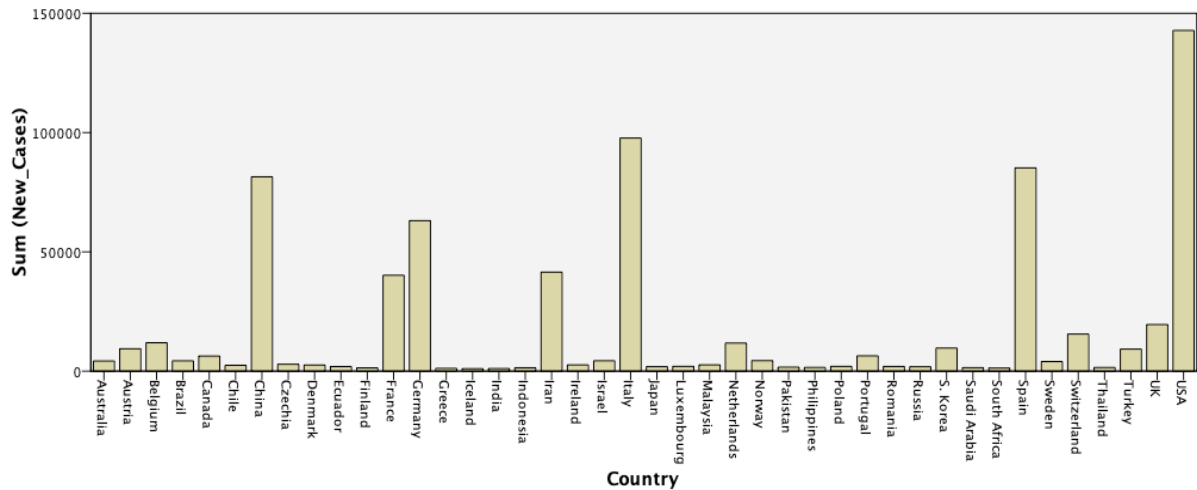
There is variation observed in percentage of deaths among 42 countries. Why this is so^{6,7,8?}

The possible and probable reasons for this variation could be: in population affected in countries; in people with comorbidities in different countries; in lab test done in countries; in strategies adopted

Table 1. showing Total cases, New Cases, Total Deaths, New Deaths, Total Recovered, Active Cases, Serious Critical Total Case/1MP, Death/1MP, Reported 1 Cases.

COVID-19 CORONAVIRUS PANDEMIC										
Last updated: March 30, 2020, 13:36 GMT										
World	739,371	+17,012	35,016	+1,050	156,402	547,953	28,434	94.9	4.5	Jan 10
Country other	Total cases	New cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious Critical	Total case /1MP	Death/1MP	Reported 1sr case
<u>USA</u>	142,793	+333	2,490	+6	4,562	135,741	2,970	431	8	Jan 20
<u>Italy</u>	97,689		10,779		13,030	73,880	3,906	1,616	178	Jan 29
<u>Spain</u>	85,195	+5,085	7,340	+537	16,780	61,075	5,231	1,822	157	Jan 30
<u>China</u>	81,470	+31	3,304	+4	75,700	2,466	633	57	2	Jan 10
<u>Germany</u>	63,079	+644	545	+4	9,211	53,323	1,979	753	7	Jan 26
<u>Iran</u>	41,495	+3,186	2,757	+117	13,911	24,827	3,511	494	33	Feb 18
<u>France</u>	40,174		2,606		7,202	30,366	4,632	615	40	Jan 23
<u>UK</u>	19,522		1,228		135	18,159	163	288	18	Jan 30
<u>Switzerland</u>	15,526	+697	333	+33	1,823	13,370	301	1,794	38	Feb 24
<u>Belgium</u>	11,899	+1,063	513	+82	1,527	9,859	927	1,027	44	Feb 03
<u>Netherlands</u>	11,750	+884	864	+93	250	10,636	1,053	686	50	Feb 26
<u>S. Korea</u>	9,661	+78	158	+6	5,228	4,275	59	188	3	Jan 19
<u>Austria</u>	9,377	+589	108	+22	636	8,633	193	1,041	12	Feb 24
<u>Turkey</u>	9,217		131		105	8,981	568	109	2	Mar 09
<u>Portugal</u>	6,408	+446	140	+21	43	6,225	164	628	14	Mar 01
<u>Canada</u>	6,320		65		573	5,682	120	167	2	Jan 24
<u>Norway</u>	4,393	+109	31	+5	12	4,350	97	810	6	Feb 25
<u>Israel</u>	4,347	+100	16	+1	134	4,197	80	502	2	Feb 20
<u>Brazil</u>	4,316	+60	139	+3	120	4,057	296	20	0.7	Feb 24
<u>Australia</u>	4,245	+82	18	+1	244	3,983	28	166	0.7	Jan 24
<u>Sweden</u>	4,028	+328	146	+36	16	3,866	306	399	14	Jan 30
<u>Czechia</u>	2,878	+61	17	+1	11	2,850	52	269	2	Feb 29
<u>Malaysia</u>	2,626	+156	37	+2	479	2,110	94	81	1	Jan 24
<u>Ireland</u>	2,615		46		5	2,564	59	530	9	Feb 28
<u>Denmark</u>	2,555	+160	77	+5	1	2,477	113	441	13	Feb 26
<u>Chile</u>	2,449	+310	8	+1	156	2,285	14	128	0.4	Mar 02
<u>Luxembourg</u>	1,988	+38	22	+1	40	1,926	25	3,176	35	Feb 28
<u>Poland</u>	1,984	+122	26	+4	7	1,951	3	52	0.7	Mar 03
<u>Romania</u>	1,952	+137	46	+3	206	1,700	31	101	2	Feb 25
<u>Ecuador</u>	1,924		58		3	1,863	58	109	3	Feb 28
<u>Japan</u>	1,866		54		424	1,388	56	15	0.4	Jan 14
<u>Russia</u>	1,836	+302	9	+1	66	1,761	8	13	0.06	Jan 30
<u>Pakistan</u>	1,650	+53	20	+6	29	1,601	11	7	0.09	Feb 25
<u>Philippines</u>	1,546	+128	78	+7	42	1,426	1	14	0.7	Jan 29
<u>Thailand</u>	1,524	+136	9	+2	229	1,286	11	22	0.1	Jan 12
<u>Saudi Arabia</u>	1,453	+154	8		66	1,379	12	42	0.2	Mar 01
<u>Indonesia</u>	1,414	+129	122	+8	75	1,217		5	0.4	Mar 01
<u>Finland</u>	1,352	+112	13	+2	10	1,329	49	244	2	Jan 28
<u>South Africa</u>	1,280		2		31	1,247	7	22	0.03	Mar 04
<u>Greece</u>	1,156		39		52	1,065	66	111	4	Feb 25
<u>India</u>	1,071	+47	29	+2	100	942		0.8	0.02	Jan 29
<u>Iceland</u>	1,020		2		135	883	25	2,989	6	Feb 27

Source: COVID-19 CORONAVIRUS PANDEMIC. <https://www.worldometers.info/coronavirus/>



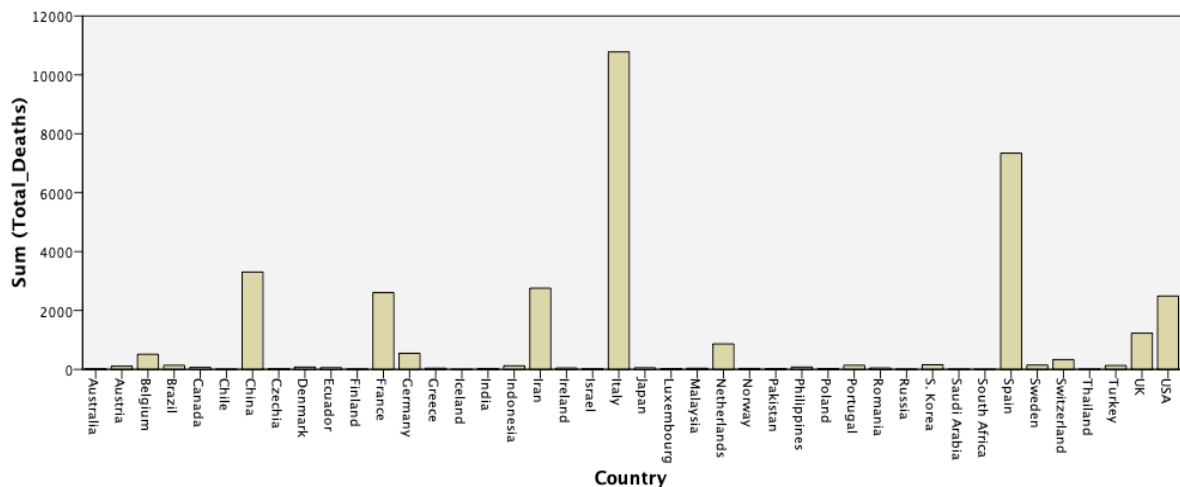
Source: COVID-19 CORONAVIRUS PANDEMIC. <https://www.worldometers.info/coronavirus/>

Figure 1: Total cases in 42 countries reported more than 1000 COVID-19 cases on March 30, 2020

Table 2. Total cases, total deaths and percentage of deaths in 42 countries reported more than 1000 Covid-19 cases on March 30, 2020

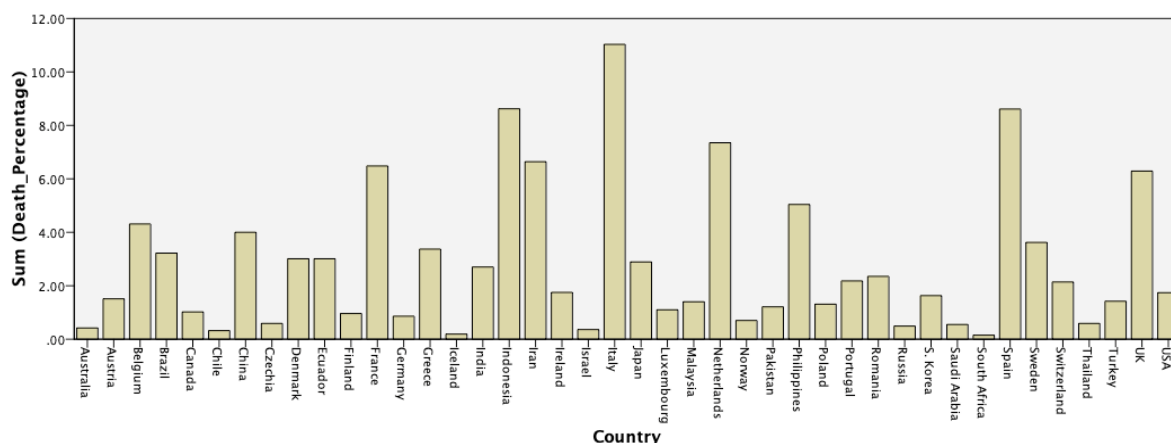
Country	Total New Cases	Total Deaths	Percentage of Deaths	Country	Total New Cases	Total Deaths	Percentage of Deaths	Country	Total New Cases	Total Deaths	Percentage of Deaths
USA	142793	2490	1.74	Portugal	6408	140	2.18	Romania	1952	46	2.35
Italy	97689	10779	11.03	Canada	6320	65	1.02	Ecuador	1924	58	3.01
Spain	85195	7340	8.61	Norway	4393	31	.70	Japan	1866	54	2.89
China	81470	3304	4.00	Israel	4347	16	.36	Russia	1836	9	.49
Germany	63079	545	.86	Brazil	4316	139	3.22	Pakistan	1650	20	1.21
Iran	41495	2757	6.64	Australia	4245	18	.42	Philippines	1546	78	5.04
France	40174	2606	6.48	Sweden	4028	146	3.62	Thailand	1524	9	.59
UK	19522	1228	6.29	Czechia	2878	17	.59	Saudi Arabia	1453	8	.55
Switzerland	15526	333	2.14	Malaysia	2626	37	1.40	Indonesia	1414	122	8.62
Belgium	11899	513	4.31	Ireland	2615	46	1.75	Finland	1352	13	.96
Netherlands	11750	864	7.35	Denmark	2555	77	3.01	South Africa	1280	2	.15
S. Korea	9661	158	1.63	Chile	2449	8	.32	Greece	1156	39	3.37
Austria	9377	108	1.51	Luxembourg	1988	22	1.10	India	1071	29	2.70
Turkey	9217	131	1.42	Poland	1984	26	1.31	Iceland	1020	2	.19

Source: COVID-19 CORONAVIRUS PANDEMIC. <https://www.worldometers.info/coronavirus/>



Source: COVID-19 CORONAVIRUS PANDEMIC. <https://www.worldometers.info/coronavirus/>

Figure 2: Total Deaths in 46 countries reported more than 1000 COVID-19 cases on March 30, 2020.



Source: COVID-19 CORONAVIRUS PANDEMIC. <https://www.worldometers.info/coronavirus/>

Figure 3: Percentage of Deaths in 42 countries reported more than 1000 COVID-19 cases on March 30, 2020.

for isolation and quarantine; in treatment especially drugs used and their adverse effects; in healthcare responses; in temperature between different countries, regions or in seasons; in preventive methods, their timing and frequency; in virulence of virus; in immunity differences among people of different countries or among different sections of people within same country; in awareness campaigns and public's response to it and possibilities of mutation of virus

It is recommended to know the exact reasons for this variation in COVID-19 deaths for future course of action. Hence, analytical studies or systemic review or meta-analysis are required to address this issue.

References

1. World Health Organisation. Global Tuberculosis Report 2019 [Internet]. Geneva, Switzerland; 2019. Available from: <https://apps.who.int/iris/bitstream/handle/10665/329368/9789241565714-eng.pdf?ua=1>
2. Ryan H, Yoo J, Darsini P. Corticosteroids for tuberculous pleurisy. Cochrane database Syst Rev [Internet]. 2017 [cited 2019 Oct 6]; 3(3): CD001876. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28290161>
3. Zhai K, Lu Y, Shi HZ. Tuberculous pleural effusion. J Thorac Dis [Internet]. 2016 Jul [cited 2019 Oct 6]; 8(7): E486-94. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27499981>
4. Shaw JA, Irusen EM, Diacon AH, et al. Pleural tuberculosis: A concise clinical review. Clin Respir J. 2018 May 1; 12(5): 1779-86.
5. Cohen LA, Light RW. Tuberculous Pleural Effusion. Turkish Thorac J [Internet]. 2015 Jan [cited 2019 Oct 5]; 16(1): 1-9. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29404070>
6. Central TB Division (Ministry of Health and Family Welfare). India TB Report 2019: Revised National Tuberculosis Control Programme Annual Report [Internet]. Delhi, India; 2019. Available from: <https://tbcindia.gov.in/WriteReadData/India TB Report 2019.pdf>
7. Sharma SK, Ryan H, Khaparde S, et al. Index-TB guidelines: Guidelines on extrapulmonary tuberculosis for India. Indian J Med Res [Internet]. 2017 Apr [cited 2019 Oct 6]; 145(4): 448-63. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28862176>
8. Desai C, Shah A, Dikshit R, et al. Efficacy and safety of anti-tuberculosis drugs in HIV-positive patients: A prospective study. Indian J Pharmacol [Internet]. 2013 [cited 2019 Dec 10]; 45(5): 447. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24130377>
9. Wyser C, Walz G, Smedema JP, et al. Corticosteroids in the treatment of tuberculous pleurisy: A double-blind, placebo-controlled, randomized study. Chest. 1996; 110(2): 333-8.
10. Antonangelo L, Faria CS, Sales RK. Tuberculous pleural effusion: diagnosis & management. Expert Rev Respir Med [Internet]. 2019 Aug 3; 13(8): 747-59. Available from: <https://doi.org/10.1080/17476348.2019.1637737>