

Update report and analysis on the global trends and progress of Covid -19 pandemic on 18th January, 2022 across different countries of the world.

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Abstract:

Background/Aim: there has been lots of curiosity and pandemonium caused by upsurge of Covid -19 to global level. Steady global observation is immensely necessary track progress and drawbacks. This study is aim at analysing the global trends and progress of Covid -19 pandemic as at 18th January, 2022 across different countries of the world.

Method: Data from one hundred and eighty one (181) countries and regions of the world. Information was gotten from United Nations Geoscheme, WHO. Data were collated and analyzed

Result: American continent appears to still be most affected by the virus with a high infection rate and even higher report of mortality. Europe is also affected but with better control of mortality, while African continents, with exception of South Africa, have are been less affected base on available data.

Conclusion: While there appears to be a conflicting approach on how best to manage and live with the virus, the new variants suggests that understanding and utilizing Africans biological survival mechanism may be the best way to regain near normal freedom.

Keyword: continents, countries, Africa, USA, COVID-19

I. INTRODUCTION

Coronaviruses (CoV) is among the family of viruses that cause illness ranging from less severe to more severe diseases. nCoV is a new variant that has not been previously identified in humans (1). The new virus was subsequently named the "COVID-19 virus. The novel virus was first identified in Wuhan, a city in China, in December of 2019; an immediate lockdown in Wuhan and other surrounding cities failed to contain the outbreak, resulting in its spread to different parts of the world(2,3). On 30 January 2020, The World Health Organization (WHO) declared an international Public Health Emergency on pandemic (2,4). different variants of the virus have since emerged and become dominant in many countries since the outbreak, with the Alpha, Beta, Gamma, Delta variants and Omicron being

the most prevalent per period(5). COVID-19 symptoms range from simple to life-threatening. Studies have shown that severe illness is more likely in elderly patients and those with underlying co morbidity diseases(6). Transmission most times occurs when people breathe in virus contaminated air by droplets and airborne particles. The risk of infection via breathing in is more when people are in close proximity, but the virus can also transmit, over longer distances, particularly closed and in poorly ventilated areas. Transmission can also rarely occur, through contaminated surfaces, equipment or fluids. They are contagious for about 20 days, and can still spread the virus without developing symptoms (7).

Scientists are still puzzled by the outbreak. Some believed that the virus began in animals while others think it's from Wuhan lab. At some point one or more humans acquired infection from an animal or laboratory leakage to affect humans, and those infected humans may have transmitted the original or mutated viral version to other humans (8). It can also be transmitted through contact with hands or surfaces that have been previously exposed by the virus and touch the body opening with the contaminated hands (9,10).

Their serious concern and study on the different waves of the disease has. This may be due to change in weather and continuously mutated strain of the virus that has been identified (11). There is the need to study this cases per country and region with respect to the virulent and spreadability of the mutated strain. Also, some interesting studies has been carried out on the dermatographic, nature and strength of the virus, but analyzing an updated information per time is also predicated in managing the trend (12,13,14,15). The aim of this study is to analyze and understand the progress, trend and consequences of Covid -19 pandemic over a seven days period across different countries of the world.

II. MATERIAL AND METHOD

One hundred and eighty one (181) nations from different continents and regions of the world were selected. Data used where obtained January 18, 2022 from United Nations Geoscheme and WHO (16). The Data obtained for these countries over 7 days per 100000 populations, were analyzed and compared directly with the values gotten for USA. USA was used as a Comparism Factor (CF) or Oyepata Factor (OF) because it a populous country with one of the best health system and also has highest COVID-19 cases with a relatively large population in the world.

Statistical Analysis

In this work markers as cumulative cases and cumulative cases of death per 100000 population were compared against

values of USA. Bivariate analysis, was used and Chi-square test, to compare proportions of all variables. In reporting this study, country observations are scaled to present a comparison of two countries similar in all other respects. Thus, rate ratios less than one insinuate that lesser levels of a given characteristic are associated with lesser rates of infection or mortality and vice versa.

III. RESULT

American continent appears to still be most affected by the virus with a high infection rate and even higher report of mortality. Europe is also affected but with better control of mortality, while African continents, with exception of South Africa, have developed an unexpected survival mechanism to the infection (Table 1).

Table 1: Cases And Death Of COVID-19

S/N	Country,	Total	Total	Tot Cases/	Deaths/		
	Other	Cases A	Deaths B	1M pop C	1M pop D	C/209001	D/2638
1	USA	69,808,350	880,976	209,001	2,638	1.00	1.00
2	India	38,218,773	487,719	27,279	348	0.13	0.13
3	Brazil	23,420,861	621,927	108,985	2,894	0.52	1.10
4	UK	15,506,750	152,872	226,580	2,234	1.08	0.85
5	France	15,175,464	127,869	231,696	1,952	1.11	0.74
6	Russia	10,938,261	324,060	74,903	2,219	0.36	0.84
7	Turkey	10,664,372	85,253	124,374	994	0.60	0.38
8	Italy	9,219,391	142,205	152,831	2,357	0.73	0.89
9	Spain	8,676,916	91,437	185,472	1,954	0.89	0.74
10	Germany	8,262,398	116,868	98,129	1,388	0.47	0.53
11	Argentina	7,446,626	118,628	162,455	2,588	0.78	0.98
12	Iran	6,236,567	132,152	72,808	1,543	0.35	0.58
13	Colombia	5,624,520	131,437	108,744	2,541	0.52	0.96
14	Mexico	4,495,310	302,112	34,307	2,306	0.16	0.87
15	Poland	4,406,553	103,378	116,630	2,736	0.56	1.04
16	Indonesia	4,277,644	144,199	15,387	519	0.07	0.20
17	Ukraine	3,799,382	98,843	87,692	2,281	0.42	0.86
18	Netherlands	3,680,896	21,178	214,085	1,232	1.02	0.47
19	South Africa	3,568,900	93,707	59,023	1,550	0.28	0.59
20	Philippines	3,324,478	53,153	29,726	475	0.14	0.18
21	Canada	2,844,910	32,008	74,368	837	0.36	0.32
22	Malaysia	2,817,163	31,831	85,348	964	0.41	0.37
23	Peru	2,723,166	203,750	80,847	6,049	0.39	2.29
24	Czechia	2,678,767	36,972	249,425	3,443	1.19	1.31
25	Belgium	2,575,313	28,726	220,721	2,462	1.06	0.93
26	Thailand	2,353,062	21,990	33,581	314	0.16	0.12
27	Iraq	2,131,500	24,267	51,215	583	0.25	0.22
28	Vietnam	2,094,802	36,266	21,225	367	0.10	0.14
29	Israel	2,035,432	8,362	218,253	897	1.04	0.34
30	Australia	2,022,581	2,890	77,918	111	0.37	0.04

31	Portugal	2,003,169	19,413	197,344	1,912	0.94	0.72
32	Japan	1,972,893	18,457	15,673	147	0.07	0.06
33	Romania	1,964,021	59,428	103,159	3,121	0.49	1.18
34	Chile	1,902,657	39,431	98,225	2,036	0.47	0.77
35	Switzerland	1,833,443	12,659	209,473	1,446	1.00	0.55
36	Greece	1,723,496	22,285	166,615	2,154	0.80	0.82
37	Sweden	1,700,336	15,587	166,752	1,529	0.80	0.58
38	Bangladesh	1,653,182	28,180	9,886	169	0.05	0.06
39	Austria	1,503,668	13,956	165,493	1,536	0.79	0.58
40	Serbia	1,484,516	13,152	170,971	1,515	0.82	0.57
41	Hungary	1,385,500	40,757	143,988	4,236	0.69	1.61
42	Pakistan	1,345,801	29,042	5,915	128	0.03	0.05
43	Denmark	1,188,908	3,535	204,147	607	0.98	0.23
44	Ireland	1,122,428	6,087	223,449	1,212	1.07	0.46
45	Jordan	1,117,397	13,028	107,857	1,258	0.52	0.48
46	Kazakhstan	1,100,876	13,105	57,564	685	0.28	0.26
47	Morocco	1,068,941	15,025	28,438	400	0.14	0.15
48	Georgia	1,021,943	14,582	256,944	3,666	1.23	1.39
49	Cuba	1,008,616	8,348	89,133	738	0.43	0.28
50	Slovakia	896,798	17,520	164,136	3,207	0.79	1.22
51	Nepal	887,769	11,632	29,644	388	0.14	0.15
52	Bulgaria	851,945	32,431	124,056	4,722	0.59	1.79
53	Croatia	848,150	13,300	208,594	3,271	1.00	1.24
54	Lebanon	840,514	9,429	124,005	1,391	0.59	0.53
55	Tunisia	817,051	25,881	68,030	2,155	0.33	0.82
56	UAE	816,945	2,204	81,083	219	0.39	0.08
57	Bolivia	785,094	20,439	65,866	1,715	0.32	0.65
58	Belarus	721,103	5,882	76,352	623	0.37	0.24
59	S. Korea	712,503	6,480	13,879	126	0.07	0.05
60	Guatemala	659,655	16,203	35,796	879	0.17	0.33
61	Saudi Arabia	638,327	8,914	17,904	250	0.09	0.09
62	Costa Rica	631,311	7,434	122,201	1,439	0.58	0.55
63	Ecuador	629,507	34,232	34,861	1,896	0.17	0.72
64	Azerbaijan	628,166	8,550	61,101	832	0.29	0.32
65	Panama	602,606	7,554	136,339	1,709	0.65	0.65
66	Sri Lanka	598,536	15,243	27,771	707	0.13	0.27
67	Lithuania	589,074	7,708	221,171	2,894	1.06	1.10
68	Slovenia	569,620	5,732	273,937	2,757	1.31	1.05
69	Norway	554,778	1,412	101,110	257	0.48	0.10
70	Uruguay	543,166	6,258	155,529	1,792	0.74	0.68
71	Myanmar	533,604	19,306	9,706	351	0.05	0.13
72	Dominican Republic	517,611	4,274	46,986	388	0.22	0.15
73	Paraguay	516,555	16,887	71,071	2,323	0.34	0.88
74	Kuwait	479,640	2,480	109,799	568	0.53	0.22
75	Venezuela	461,059	5,392	16,285	190	0.08	0.07

76	Ethiopia	459,959	7,190	3,853	60	0.02	0.02
77	Palestine	448,398	4,767	84,846	902	0.41	0.34
78	Mongolia	417,557	2,092	124,273	623	0.59	0.24
79	Finland	416,079	1,790	74,914	322	0.36	0.12
80	Egypt	403,990	22,238	3,836	211	0.02	0.08
81	Libya	401,444	5,889	57,219	839	0.27	0.32
82	Moldova	396,678	10,470	98,690	2,605	0.47	0.99
83	Honduras	386,756	10,465	38,110	1,031	0.18	0.39
84	Armenia	349,329	8,026	117,547	2,701	0.56	1.02
85	Bosnia and Herzegovina	324,026	13,912	99,725	4,282	0.48	1.62
86	Kenya	319,011	5,520	5,737	99	0.03	0.04
87	Oman	318,272	4,125	59,967	777	0.29	0.29
88	Bahrain	317,380	1,398	177,014	780	0.85	0.30
89	Latvia	314,142	4,759	169,451	2,567	0.81	0.97
90	Qatar	314,073	632	111,857	225	0.54	0.09
91	Zambia	299,971	3,879	15,640	202	0.07	0.08
92	Singapore	296,077	844	50,000	143	0.24	0.05
93	Estonia	278,498	1,994	209,725	1,502	1.00	0.57
94	Nigeria	251,571	3,117	1,175	15	0.01	0.01
95	North Macedonia	249,704	8,153	119,863	3,914	0.57	1.48
96	Botswana	239,887	2,534	98,919	1,045	0.47	0.40
97	Albania	239,129	3,283	83,235	1,143	0.40	0.43
98	Cyprus	233,082	689	190,899	564	0.91	0.21
99	Algeria	228,918	6,443	5,078	143	0.02	0.05
100	Zimbabwe	227,552	5,276	14,973	347	0.07	0.13
101	Mozambique	220,908	2,140	6,774	66	0.03	0.03
102	Uzbekistan	209,578	1,529	6,124	45	0.03	0.02
103	Montenegro	208,171	2,493	331,383	3,969	1.59	1.50
104	Kyrgyzstan	193,028	2,842	28,850	425	0.14	0.16
105	Uganda	159,454	3,454	3,324	72	0.02	0.03
106	Afghanistan	159,303	7,386	3,954	183	0.02	0.07
107	Namibia	154,756	3,864	59,246	1,479	0.28	0.56
108	Ghana	154,614	1,354	4,820	42	0.02	0.02
109	Luxembourg	131,644	941	205,136	1,466	0.98	0.56
110	Rwanda	126,685	1,417	9,420	105	0.05	0.04
111	Cambodia	120,914	3,015	7,080	177	0.03	0.07
112	Jamaica	116,084	2,555	38,939	857	0.19	0.32
113	Cameroon	109,666	1,853	3,978	67	0.02	0.03
114	Maldives	108,732	265	195,816	477	0.94	0.18
115	China	105,411	4,636	73	3	0.00	0.00
116	Trinidad and Tobago	102,942	3,238	73,190	2,302	0.35	0.87
117	Angola	94,779	1,877	2,751	54	0.01	0.02
118	Senegal	83,752	1,917	4,806	110	0.02	0.04
119	Malawi	83,219	2,491	4,183	125	0.02	0.05
120	DRC	82,984	1,278	885	14	0.00	0.01

121	Ivory Coast	79,558	764	2,905	28	0.01	0.01
122	Malta	65,005	520	146,617	1,173	0.70	0.44
123	Fiji	60,509	752	66,750	830	0.32	0.31
124	Mauritania	56,296	914	11,635	189	0.06	0.07
125	Madagascar	55,827	1,169	1,939	41	0.01	0.02
126	Iceland	53,121	44	154,120	128	0.74	0.05
127	Sudan	53,080	3,390	1,168	75	0.01	0.03
128	Syria	50,821	2,956	2,799	163	0.01	0.06
129	Gabon	45,405	299	19,682	130	0.09	0.05
130	Belize	44,145	611	107,987	1,495	0.52	0.57
131	Channel Islands	37,613	124	213,292	703	1.02	0.27
132	Barbados	37,063	271	128,727	941	0.62	0.36
133	Burundi	36,785	38	2,957	3	0.01	0.00
134	Papua New Guinea	36,446	596	3,958	65	0.02	0.02
135	Togo	36,120	264	4,210	31	0.02	0.01
136	Guinea	35,719	410	2,610	30	0.01	0.01
137	Mayotte	35,189	186	124,345	657	0.59	0.25
138	Curaçao	34,886	207	211,261	1,254	1.01	0.48
139	Seychelles	32,846	140	330,809	1,410	1.58	0.53
140	Tanzania	32,393	753	519	12	0.00	0.00
141	Lesotho	31,899	690	14,710	318	0.07	0.12
142	Aruba	31,603	187	294,069	1,740	1.41	0.66
143	Bahamas	31,549	719	79,058	1,802	0.38	0.68
144	Andorra	29,888	142	385,871	1,833	1.85	0.69
145	Mali	29,257	701	1,383	33	0.01	0.01
146	Haiti	28,030	780	2,413	67	0.01	0.03
147	Benin	26,309	163	2,086	13	0.01	0.00
148	Mauritius	25,035	762	19,635	598	0.09	0.23
149	Somalia	24,261	1,335	1,463	81	0.01	0.03
150	Congo	23,244	371	4,058	65	0.02	0.02
151	Burkina Faso	20,414	353	937	16	0.00	0.01
152	Tajikistan	17,095	124	1,732	13	0.01	0.00
153	South Sudan	16,607	136	1,457	12	0.01	0.00
154	Brunei	15,986	98	36,007	221	0.17	0.08
155	Equatorial Guinea	15,558	179	10,553	121	0.05	0.05
156	New Zealand	15,334	52	3,066	10	0.01	0.00
157	Gambia	11,572	347	4,589	138	0.02	0.05
158	Gibraltar	11,216	100	333,066	2,970	1.59	1.13
159	Grenada	10,707	204	94,475	1,800	0.45	0.68
160	San Marino	10,639	103	312,535	3,026	1.50	1.15
161	Yemen	10,407	1,994	337	65	0.00	0.02
162	Bermuda	9,144	110	147,670	1,776	0.71	0.67
163	Eritrea	9,115	89	2,516	25	0.01	0.01
164	Niger	8,472	294	331	12	0.00	0.00
165	Dominica	7,957	48	110,112	664	0.53	0.25

166	Comoros	7,784	159	8,666	177	0.04	0.07
167	Saint Martin	7,713	60	194,351	1,512	0.93	0.57
168	Sierra Leone	7,562	125	919	15	0.00	0.01
169	Guinea-Bissau	7,140	153	3,500	75	0.02	0.03
170	Liberia	7,121	287	1,359	55	0.01	0.02
171	Monaco	7,041	44	177,476	1,109	0.85	0.42
172	Chad	6,887	185	401	11	0.00	0.00
173	St. Vincent Grenadines	6,604	88	59,236	789	0.28	0.30
174	Caribbean Netherlands	5,824	27	218,947	1,015	1.05	0.38
175	Antigua and Barbuda	5,741	121	57,882	1,220	0.28	0.46
176	Sao Tome and Principe	5,651	66	25,065	293	0.12	0.11
177	British Virgin Islands	5,449	47	178,404	1,539	0.85	0.58
178	Turks and Caicos	5,271	32	133,349	810	0.64	0.31
179	Saint Kitts and Nevis	5,065	28	94,176	521	0.45	0.20
180	Bhutan	3,317	3	4,227	4	0.02	0.00
181	St. Barth	2,927	6	294,942	605	1.41	0.23

Key:

Data used were obtained from WHO/World meter's as at 18th, January, 2022

Figures obtained for USA were used in determining the comparism factor (CF) or Oyepata Factor which is a ratio of figure obtained to that of a particular country population divided by that of the USA.

Values of CF1 (or OF1) and CF2 (or OF2) represent case/incidence and mortality index.

Factor of more than 1 = very high infection and mortality index

Factor of approximately 1 = high infection and mortality index

Factor of ≤ 1 but ≥ 0.5 = moderately high infection and mortality index

Factor of ≤ 0.5 but ≥ 0.1 = low infection and mortality index

Factor of < 0.1 = very low infection, mortality and recovery index

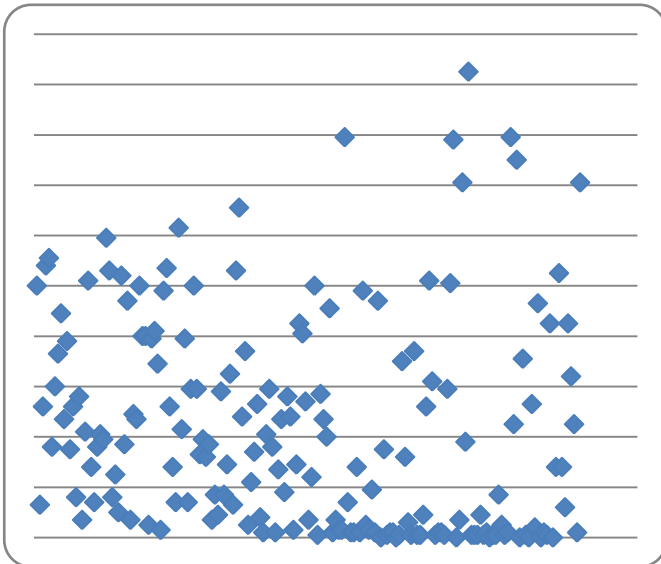


Figure 1: Graph Showing Comparism Factor Per Country Relative To Usa As At January 18, 2022.

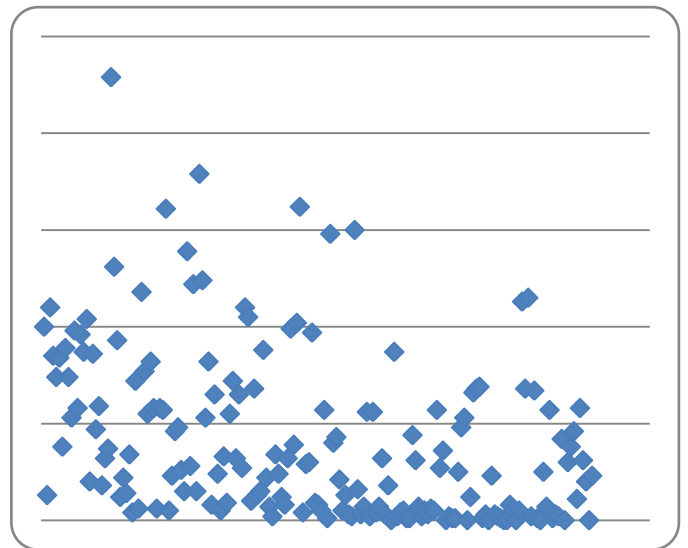


Figure 2: Graph Showing Death Oyepata Factor Caused By Covid-19 For Each Country Relative To Usa As At 18th, January, 2022.

IV. DISCUSSION

There has been lot of medical, political and media arguments on how best to understand, manage and survive with the pandemic. The scientific world still struggles to grapple on

how best to contain the seemingly unending onslaughts of virus, with no convincing end in sight(17,18). Recently, there has been new mutated strain of the virus from the original strain, with many possible strain unfortunately expected to keep reshaping our understanding of the situation(19,20,21). This has caused unprecedented burden to public health, food and world workforce. Various variant have been indentified in several countries, and it could potentially affect thousands to millions of deaths if not properly handled (22,23).

The number of cases and mortality are increasing daily, couple with the socio-economic and psychological devastation left behind by the pandemic(24,25). More recent vaccines contain the blueprint for producing antigens rather than the antigen itself (26,27). The weakened version is not expected to cause the disease in the receiver of the vaccine, but it will trigger the immune system to responded appropriately much as if its first reaction to the actual pathogen attack (28,29). Some vaccines may require more than one doses to be administer over a period of time. This is sometimes necessary so as to give more room for development of long-lived antibodies and establishing of memory cells (30,31). Hence, the body might be trained to combat specific infection-causing organism (32).

America continent, appears to have more infectivity and higher reports of mortality from the new variant of Covid-19. Africa has been least plagued by the all variant at all phases. Also, most European countries have lesser mortality ratio when compared to American continents. These observations interesting, compared previous works on the cumulative effect of the virus (33,34,35). Africans appear to be unaffected from this seemingly uncontrollable and lethal unleash. Apart from fewer cases of the infection, Africans have showed potential to have much lesser mortality even when compared to case of the infection (36,37,38). This suggest that Africans body system have over time developed a more progressive, robust and faster immune response that reduces chances of the virus causing disease related health complication. Compared to previous cumulative observation, though mortality rate remained higher than other western countries, USA has made remarkable stride in preventing and reducing the cases of infection compared to several other countries that suffered same fate from the virus. From available data, Africa which generally is classified as third world or clearly underdeveloped do not have severe medical consequences of the infection, and when infected they tends to recover faster with lower chance of complications and mortality.

As previously noted, Africans lives as a community and in dense clusters which is obviously different to most western countries that exist in solitary system (39,40). Thus, it is expected that most individuals in Africa may have been exposed to the virus without knowing or developing major symptoms. This has made several observers around the world to speculate that Africa may consequentially become a graveyard. Reasons for this fortunately unexpected result has puzzled many analyst around the world. Studies have shown,

that because of poor health and environment, the immune systems of African children tends to develop faster and more robust compared to Dutch children (41,42,43). Childhood Exposure to pathogenic organism may have boasted the immune system and protect children from developing certain allergies and other infectious diseases, on later exposure to the similar allergen or pathogen (44,45). This view is also supported with data and comparism factor obtained from Haiti. Haiti is currently the poorest country in the Latin America and Caribbean region and among least developed countries in the world (46,47). They have one the least case of infection and mortality resulting in little to no significant value of comparism factor. Thus, childhood or early exposure to some diseases in poor countries may have encouraged a more robust immune response to same or related infection. Therefore, several African countries be both vulnerable and potentially more defensive against the coronavirus.

V. CONCLUSION

There is the likelihood of the virus spreading fast across African populations within a minimal period of time causing a large proportion to have been exposed to the virus without showing obvious symptoms and may have possibly recovered fully. Therefore, there is need for a more robust COVID-19 testing; antibody testing, which will explain who has been exposed than the popular antigen testing which only provides active disease state. This will significantly affect the quantity and quality time and resources that a give region need.

Many underdeveloped countries, particularly Africans and Haiti, have developed an unexpected cradle and natural mechanism to survive the infection. While there appears to be a conflicting approach on how best to manage and beyond the pandemic, the new variants suggests that understanding and utilizing Africans biological survival mechanism may be the best way to regain near normal freedom.

Conflict of Interest

The authors declare that there are not any potential conflicts of interest

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Authors' contributions

Joseph OS and Joseph OT were involved in collection of data and development of model for analysis. Joseph OS, Joseph SO, Joseph OT and Sebastine AZ were responsible for analysis and writing of this manuscript..

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