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Use of Instagram to Calculate the Blood Groups that are more Vulnerable to COVID 19

[1]Dr.Adeel Ahmed Bajjad, [2]Dr. Navneet Kour

[1]MDS Student, Dept. Of Orthodontics Kothiwal Dental College And Research Centre, Moradabad, Uttar Pradesh.
[2]MDS Student, Dept. Of Periodontology And Implantology, BRS Dental College And Hospital, Sultanpur, Panchkula,Haryana.

ABSTRACT: The tale coronavirus ailment 2019 (COVID-19) has been spreading around the world quickly and proclaimed as a pandemic by WHO. Hardly any individuals tainted by the coronavirus are getting genuinely sick, while others give next to zero indications of the manifestations, or are asymptomatic.The appropriate response may lie in an individual's blood gathering. Late explores are highlighting the way that the ABO blood gathering may assume a significant job in an individual's weakness to the infection.

Objective: The main aim of our study was to evaluate the susceptibility of COVID-19 among the study populations using instagram as a medium of gathering information.

Results: Although our results were inconsistent and reveled a low population with blood group A, but made social networking sites more useful in data collection.

Conclusion: As our study consisted of a small population, many more studies need to be done to reveal the correlation between COVID 19 and ABO system.

Keywords: ABO system, COVID-19, Pandemic

I. INTRODUCTION

The epic coronavirus SARS-CoV-2, causing the new irresistible coronavirus malady 2019 (COVID-19), is right now spreading quickly around the globe; it has been as of late pronounced as a pandemic by WHO. Ongoing clinical perception proposes that patient age, male sex and certain interminable ailments (e.g., cardiovascular ailment, diabetes, COPD) appear to speak to a hazard for the disease of SARS-Cov-2[1]. There is at present no organic marker known to anticipate the weakness to COVID-19.

Landsteiner's ABO blood classifications are sugar epitopes that are available on the outside of human cells. The antigenic determinants of A and B blood bunches are trisaccharide moieties GalNAcα1-3-(Fucα1, 2)- Galβ- andGalα1-3-(Fucα1,2)- Galβ-, while O blood bunch antigen is Fucα1,2-Galβ-. While blood classifications are hereditarily acquired, nature variables can possibly impact which blood classifications in a populace will be given all the more much of the time to the people to come. Helplessness of viral contamination has been

recently seen as identified with ABO blood gathering. For instance, Norwalk infection and Hepatitis B have clear blood bunch susceptibility[2, 3]. It was likewise revealed that blood bunch 'O' people were less inclined to get contaminated by SARS coronavirus[4]

Long range interpersonal communication locales like My Space, Facebook, Twitter, Instagram and many more in the age of data, for all intents and purposes individuals and associations have distinguished the criticalness of correspondence. The development of Information and Communication Technology and especially the utilization of web innovation have permitted the foundation of systems which empower immense measure of data to be moved the world over. Our period can be clearly portrayed as computerized. The most famous innovation which seems to impactly affect individuals is the Internet.[4]Social networking sites can be incredible assets for keeping in contact with companions, yet can be used as a source of data collection in various studies. Here, we researched the connection between the ABO blood classification and the susceptibility of blood group acquiring COVID-19 infections in population of India using instagram as the platform for gathering information.

II. MATERIAL AND METHODOLOGY

During the covid-19 pandemic, a short study was done on social networking sites to assess the highest number of blood group individuals, who are progressively inclined to coronavirus illness. An aggregate of 800 adherents are available in the creator's instagram account, out of which just 328 had reacted back and just around 71 devotees really took part in this investigation. Meanwhile, the outcomes were assessed utilizing frequencies with statistically significant results of $p<0.05$. All the evaluated data was represented using a graph.

III. RESULTS

Out of 71 study subjects, 23.94% of them were A blood group, 36.62% B, 5 were AB blood group and around 32.4% were o blood group subjects with mean and standard deviation of 0.140±1.182 and statistically significant results of p=0.001.

TABLE:1	ABO SYSTEM	FREQUENCY	PERCENTAGE	P-VALUE	MEAN±SD
Blood groups	A	17	23.94%	0.001	0.140 ±1.182
	B	26	36.62%		
	AB	5	7.04%		
	O	23	32.4%		
	TOTAL	71	100%		

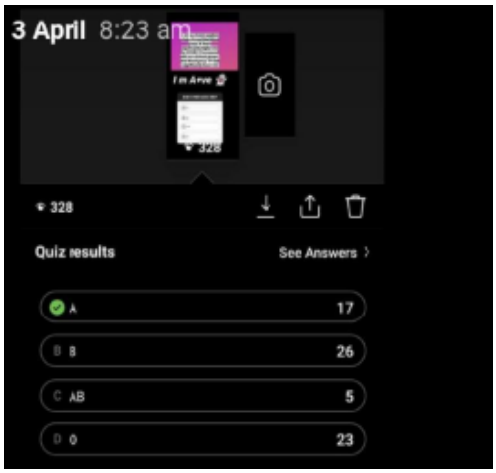

Figure1: Representing a screenshot of instagram story.

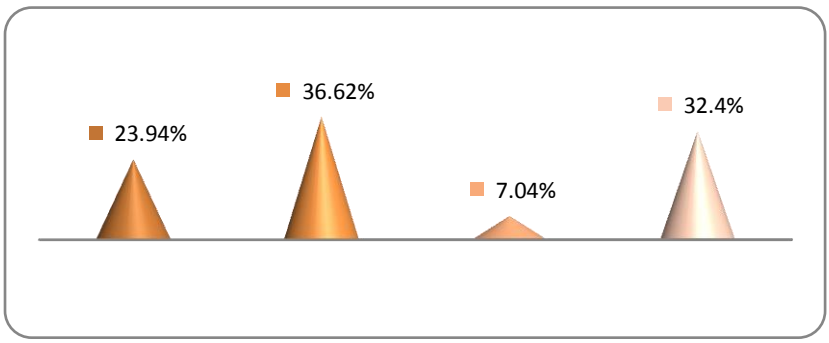

Figure 2 : Graphical representation of the blood group systems

IV. DISCUSSION

In this investigation, we found a limit of B blood group subjects which could have shown that this gathering could be progressively influenced by coronavirus. The outcomes were not related with considers done which spoke to A blood group being progressively inclined to coronavirus contamination. An investigation led by Zhao J et al found that, blood bunch A was related with an expanded hazard though blood bunch O was related with a diminished hazard, in this manner showing that the ABO blood classification is a biomarker for differential helplessness of COVID-19[6]. The examination discoveries were reliable with comparable hazard examples of ABO blood bunches for different coronavirus disease found in past investigations. For instance, Cheng et al. detailed that the SARS-CoV disease helplessness in Hong Kong was separated by the ABO blood bunch systems.[4] That thought about non-O blood bunch medical clinic staff, blood bunch O emergency clinic staff had a lower possibility of getting contaminated. Patrice et al. discovered that enemy of A antibodies explicitly restrained the grip of SARS-CoV S protein-communicating cells to ACE2-communicating cell lines[7]. Given the nucleic corrosive arrangement similarity[8] and receptor angiotensin-changing over chemical 2 (ACE2) restricting likeness between SARS-CoV and SARS-CoV-2[9-11], the lower defenselessness of blood bunch O and higher helplessness of blood bunch A for COVID-19 could be connected to the nearness of characteristic enemy of blood bunch antibodies, especially against An immune response, in the blood. There may likewise be other components hidden the ABO blood bunch separated defenselessness for COVID-19 that require further investigations to explain.

V. CONCLUSION

Thus, this study will require direct investigations to demonstrate. The subjects represented a small population and hence could not clearly justify the results found in various studies in which a strong association between coronavirus and A blood group was found. Being the first kind of the study on instagram, further more studies need to be done in which the large study population could reveal their blood group and the susceptibility to coronavirus can be studied.

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