

A Critical Analysis of COVID-19 Mass Media Discourse and its Impact on University Students

Rais Gul*, Muhammad Umer†

Abstract

This article reports a critical analysis of media, specifically social media discourse and its impact on learner behavior with increased focus on its content and conflicting views regarding Covid-19. This study employed a survey with open-ended questions to get the responses of BS students at Islamia College Peshawar. The themes emerged from the study of relevant literature informed the research instrument. The data were subjected to a thematic analysis for identifying similarities and dissimilarities between the primary and secondary data. The findings indicated that the conflicting views stemming from media, specifically social media, affected students. The respondents reported both negative and positive impact on their mental health and behavior. They showed conflicting views regarding the emergence, growth, remedy and decay of the virus—a clear sign that they were under the overwhelming effects social media discourse. Therefore, it is recommended that media discourse need to be very calculated, authentic and follow problem solving approach during a crisis. Political leadership should articulate their voices responsibly and excessive engagement with media at the time of crisis needs to be avoided.

Keywords: critical analysis, Covid-19, media discourse, learner behavior, infodemic

Introduction

This study critically analyzed mass media COVID-19 discourse and its impact on university students. No pandemic in the past had such a rapid and wide overflow of information thanks to media and technology. Clark (2020) states that the newly surfaced virus---COVID-19--- is a respiratory illness first discovered in Wuhan, China in December 2019. The virus belongs to the family of viruses such as Severe Acute Respiratory Syndrome and the Middle East Respiratory Syndrome (CDC, 2020). WHO in February 2020 labelled the pandemic officially as COVID—19, an acronym. *CO* stands for Corona, *vi* for virus, *D* for disease, and *19* for the year the virus detected in (Rivera, 2019).

COVID-19 has shaken and shattered the world in almost all respects. People across the world are overwhelmed physically, economically and mentally by this unprecedented virus. On physical side, they are advised to stay at home, follow social distancing and strictly observe self-isolation, while on the psychological side they are gripped by fear, uncertainty, anxiety and other worries to say the least. More than 90%

* Lecturer in Sociology, Islamia College University Peshawar

† Assistant Professor, Department of English, Islamia College University

of public discourse, media chats etc. are centered on this prevailing issue. And it would not be an exaggeration that, public psyche has never experienced such a powerful onslaught, at least in the recent history. Depicting the corona crisis Salahuddin (2020) pointed out that COVID has left lasting marks on the world's history. The stories associated with COVID, would shape the novels, poetry, memoirs, films and dramas etc. for generations. Not to mention that conspiracy theories would also emerge about the crisis. When it comes to economic devastation, Aijazzuddin (2020) argued that COVID-19 had no match in the modern history. United Nations (UN) Secretary General[‡] remarked that after WWII[§], COVID-19 is the biggest challenge the world is confronted with. Its economic impacts may be so horrific that recession never seen before in the recent past is likely to hit the world, he added (United Nations, 2020).

COVID-19 resulted in an infodemic. Infodemics roll facts and rumors into one, making it an uphill task to differentiate authentic from unauthentic information about a phenomenon. The term infodemic literally means an epidemic of information, quickly spreading in the news, online, and through social media, this information fuels fear and speculation, making the problem worse, not better. Coined in 2003, infodemic, got a wide usage in the face of COVID-19. COVID-19 infodemic is rather more dangerous than the previous pandemics considering the proliferation of rumors and baseless information spreading faster than the virus itself thanks to dramatic internet revolution (Nekmat and Yue, 2020).

Literature Review

Berezow (2020) holds that there are a number of conflicting views about the origin, spread and cure of corona virus, consolidating the conspiracy theory mindsets. For instance, the SARS-CoV-2, the cause of corona is considered to be the biological weapon of China, as revealed by none other than Tucker Carlson—a Fox News credible name. China, on the other hand, is blaming the U.S military to have unleashed the virus on Wuhan. 5G—the latest version of telecommunication technology, as explain by Dr. Thomas Cowan, is linked with so many other diseases such as cancer, asthma, memory deficit, autism, diabetes, obesity, impaired sperm functions etc., and now COVID-19 as well. Another widely circulated theory is that it is not corona rather it's the fear of it which perishes people as advocated by Brogan, a "holistic psychiatrist". Brogan

[‡]Antonio Guterres

[§] World War 2nd

negated the existence of corona virus, saying ‘she doesn’t believe in germ-based contagion’. Similarly, Corona virus outbreak is to boast-up profit for big pharmaceutical companies. And corona virus has been released to control population growth in China or across the world, are the widely spread views to be found on media. Yet, some blame the Jews for this heinous act. And worth mentioning, indeed is the novel and unscientific views to contain the disease, for instance, drinking cow urine, as is the case in India, and shoving essential oil up your butt to get rid of the covid-19. Khki (2020) explained that COVID-19 is interpreted in three ways: 1) deliberately caused, the virus was engineered deliberately by certain powers to damage others; 2) Accidental, the outcome of human error through experiments; and 3) Punishment or fatalists, the result of God’s wrath due to human sins.

Chater (2020) described that so far, the world had treated the COVID-19 with multiple strategies. For instance, the ‘storm in teacup’ approach was adopted by China and the West claiming that the danger would wipe out in no time by itself. Then ‘House on Fire’ approach---resulted in the lockdowns, social distancing and social isolation etc., -- tackling the virus as an overwhelming priority and taking the strongest action as early as possible. The third view is ‘holding back the tide’--- to contain the virus is something impossible. The only viable strategy, therefore, could be to minimize its side effects. For instance, ‘flattening the peak’ to manage the burden on health-services, and to reduce the possibility of flare-up during winter”, when those services are under most strain” and the ‘herd immunity’---which would hopefully be possible once 60—80% of the masses get recovered from being infected--- were adopted to slow down the scale of the virus in the long run.

Reich (2020) revealed that people no less than president Trump had been issuing very contradictory statements over the whole period. He first downplayed the virus threat---miscalculating its intensity. Then he claimed that with the weather becoming warm, the virus would perish. On 24th February, he told that the stock market was soaring, again the impression that things needed to be taken normal. The day after, the CDC officials rung the alarm bells. Trump even called the pandemic a seasonal flu and blamed the Democrats for over-sizing the threat. So much so, regarding a cruise ship containing Americans with corona virus floated toward San Francisco, Trump arrived at a strange explanation saying that people better stay at the ship and avoid test so that they didn’t increase the tally of the infected. But the time when stock market experienced a nosedive, only then, Trump had to declare emergency. Not to ignore, that

it was he [Trump] who fanned the flames of hatred by labeling the virus as ‘Chinese/Wuhan’ virus.

Similarly, as Khan (2020) revealed that majority of the world leaders including UK and Pakistan, have been issuing unserious, unrealistic, and voters wooing statements in the face of pandemics. When the magnitude and the severity dawned on them, it was too late. They should have followed the leaders, who coincidentally, happened to be women in this case— Angela Merkel, (the German chancellor), Tsai Ing-wen (President of Taiwan) and Prime Minister Jacinda Ardern (Prime minister New Zealand), --- They acted wisely, and were very consistent in their public statements, hence, the tally of infected and dead in their countries was far lower than others.

Bad news hijack people constantly, which is capitalized on by the media outlets—continuously instill fear into minds through sensational stories (Suttie, 2020). The misinformation—the hallmark of today’s media—therefore, might lead to irrational responses due to fear as people see in the current pandemic (Suttie, 2020; Wetsman, 2020). In this context, due to the proliferation of negative discourse by media, people become less kind and less-helpful to their fellow humans. Specifically, in the time they need to stand united. As revealed by the researches, that positive emotions strengthen the bonds of friendship and neighborhood. The negative news consumed, on the other side, may display itself in the intolerant, antisocial behavior and lack of trust among people (Suttie, 2020; Jones and Doolittle, 2017). It is too difficult to differentiate between authentic and unauthentic news in today’s world, particularly for those who stick to social media disproportionately (Suttie, 2020; West, 2017).

Robinson (2020) is of the view that regular TV watchers and news followers suffer from increased anxiety as they take the news of COVID-19 for something present outside their front door. This is mostly the result of a cognitive bias once we are in touch with a lot of negative stuff on media that make media users unrealistic about the situation and in their preparation to respond to it. For instance, ‘brain’s confirmation biases’, prompt us to believe only that news, that we already believe in and discredit the rest. Hence, the first news is often taken for reality, while the rest emerging news is ignored at all. This biased mind, further, weakens the ability to face a pandemic adequately. The optimism bias is also problematic that holds that bad things would hit others only. In COVID context, the optimistic mind is likely to result in less care regarding contracting virus and hence ignoring the needed initiatives. (Suttie, 2020). Media, therefore, need to maintain a reasonable balance in their discourse

regarding both health hazards and the causes of illness (Bomlitz and Brezis, 2008) The non-infected display in their behavior, the precautions—self-quarantine, frequent washing of hands etc. ---on such a scale that the fear of corona overtakes them mentally and then they filter out even the more encouraging news about the outbreak. This further aggravates the level of anxiety (Clark, 2020). In such situations, researchers have found that uplifting stories—arriving at solutions of the problems—are more readers’ capturing, and hence, more shared (Suttie, 2020). We therefore, need to obey the “low bad news” diet, to handle this pandemic effectively and keep our mental health sound (Suttie, 2020).

According to Concannon** (2020) WHO labeled COVID-19 the first social media infodemic circulating on all forms of social media caused the unrest. Gazara (2020) maintains that the widespread misinformation and sensationalism on social media pertaining COVID has proved an attention grabber. The positive side of social media is that people become aware of what is going on in the world around them. They also know about many encouraging events and in the time of social isolation and lockdown and they are at least inter-connected, minimizing the undesirable effects of social distancing. Experts are to inform people through social media about new emerging researches and community leaders are to inspire people to help the deprived and needed ones in the time of crisis. However, there are numerous social media users who are bent upon spreading rumors, sensations and all types of disinformation (Garza, 2020). In such situations, people may disrespect governments orders to stay at home if they see their friends to be outside their homes on Facebook, Insta- gram etc., (Garza, 2020; Pinsker, 2020.). Gazara (2020) argued that footages from the epicenter of the virus such as China and Italy might help us prepare on one hand but it may increase the air of fear and anxiety, making people more vulnerable to the threat on the other hand. Therefore, a healthy consumption of good news is advocated by experts as some news instill a reasonable level of fear. Public health officials in times of outbreak may design some health-risk messages that are more mind attracting and users engaging. Coupled with authentic and useful health related stuff, these messages can prove potentially helpful to the masses in terms of protecting and curing themselves (Garza, 2020; Begley, 2020). Birnbaum (2020) argued that social media feeds people with headlines,

**Marketing Director Europe.
The Dialogue

videos and posts that are absolutely hysterical and bear strong negative impact that must be subtracted from media.

Methodology:

The purpose of this research was to carry out a critical analysis of COVID-19 infodemics-- discourse on media--- and its impact on the students in Pakistani higher education setting. BS students served as population of the study. Cross-sectional data were collected from 60 BS Sociology Program students of Islamia College University Peshawar who served as purposive sample (Denscombe, 2007). The data were collected through an online survey with open-ended questions at the time of COVID-19 lockdown. The questions of the survey were based on the themes emerged during the study of previous literature on COVID-19. The data were collected in the month of May and June, and mid-July 2020 –the peak of the virus in KP, Pakistan. The data were subjected to thematic analysis to find out the degree of similarities and dissimilarities between the primary and secondary data.

Results and Discussion

One of the themes emerged is the statements, views, interpretations and approaches toward the origin, causes, impacts, and remedies of the novel coronavirus. As the secondary data brought to light those world leaders, governments, religious leaders etc. who issued very inconsistent and conflicting statements regarding the virus throughout the period. The students interviewed too were bearing the brunt of all this discourse. The participants indicated various views towards the pandemic. For instance, a student stated, “Though, we don’t know for sure, but, it’s just the wrestling between China and America to shape the post-pandemic world. And, the rest of the world is paying the cost knowingly or unknowingly, willingly or unwillingly”. Another student expressed that it’s nothing but conspiracy against religion. First time, as the student said, the religious ceremonious, congregational prayers etc. are officially banned even in Islamic countries under the garb of social distancing. Handshake, for instance, he said, has been recommended by our beloved prophet to be the way of cleansing seventy thousand sins, but we are told now to abandon it, what does this mean? It’s now up-to them whether they stand by their religious values or surrender to the pressure, he added.

Many students linked COVID-19 with Bill Gates, and referred to his speech, he delivered many years back, mentioning the pandemic like this one. Was he soothsayer? The student questioned, if not and of course he is not the one, then they need to understand that it's his plot to shape the world desired by him and by the powers he plays into the hands of. Similarly, some students cited the books surfaced on social media written long before mentioning the same pandemic and even a film made by American, a decade back, all the events predicted and shown therein, validate the unfolding world we are in today. For the participants it was no more than a conspiracy.

For many respondents, it's a deadly virus which has hit the world badly and that people need to listen to medical experts. Taking the threat lightly or handling it unrealistically may hurt us exponentially. Social distancing, social isolation, frequent hand washing, using sanitizers, putting on masks etc. are therefore, the ways to overcome this danger looming large. These students also came hard on those who were spreading rumors and conspiracy theories to downsize or ignore at all this unprecedented pandemic. One of the students, in this regard opined, "Linking the corona pandemic with conspiracy is tantamount to hiding one's head in the sand in the face of real danger. That approach will serve none, except spread the disease more rapidly and widely".

The participants, however, were very inconsistent in their interpretations of the COVID-19 phenomenon. This diversity in students' opinion—authentic or unauthentic—is more likely the outcome of infodemics of media, specifically social networking sites. Prooijen (2020), therefore, argued that difficult times cause conspiracy theories and corona virus went through the same media discourse treatment.

The students, who were mentioning Bill Gates to be a central figure behind the whole crisis, were probably influenced by the media contents. For instance, Reader (2020) has named a few prominent you-tubers considering Bill Gates to be the epicenter of these unfolding events. Driver (2020) brought to light the strange, conflicting views regarding the birth, impacts and end of the corona crisis. For instance, she says that the majority might be waiting for anti-corona vaccine, there are yet many, who think that vaccine is to control the world and human through the penetration of 'nanotechnology microchips' into human body. Schaeffer (8th April, 2020), revealed Pew Research Center US findings saying that

every third American believe that the virus is made in human lab. The survey covered the sample size of 8, 914 American adults. Strange yet, as highlighted by Driver (2020) are the odd and novel formulas emerging regarding the cure of the virus. For instance, Vodka can be used as hand sanitizer, being able to hold your breath for 10 seconds means you don't have coronavirus, eating Garlic prevents coronavirus, Cocaine protects against Covid, drinking Cow urine also protects against Covid and so on and so forth. Another theory quoted by students was that of Driver (2020) widely circulated through social media together with the belief of Brown (2008) that prophesied a severe pneumonia-like illness in 2020 which would affect the globe instantly and would vanish quickly. Similarly, the work of Hyat (2020) 'Covid-19 and Conspiracy' is worth reading too.

Excessive engagement, therefore, with media and consuming its negative and scary contents could cause extraordinary damage to the mental health of students like everyone else. Volkin (28th March 2020) argued that the use of social media in the current pandemic is unprecedented. For him, social media is like a double-edged sword-sharing positive, encouraging, motivational and educating news about the pandemic and spreading misinformation and rumors as well. People, therefore, are to be very meticulous about the contents and the authenticity of the sources. The participants also admitted that it was too difficult for them to differentiate between the reliable and unreliable contents. One student, said, 'The more we stay away from media, the better we feel'. Students also added that the videos gone viral on social media, showing the fate of the corona-positive patients and their families, and the helplessness of the doctors in terms of weak health infrastructure, lack of commitments and lack of expertise, appealing again and again to the government for protective kits, is all adding insult to injury. Pastreich†† (2020) remarked that media discourse revolving around correct, authentic and encouraging reporting/shows is very rare in COVID crisis.

Many of the respondents, also, highlighted the positive side of the media, specifically social media. They argued that they were thankful to media for connecting them with their friends and relatives in the era of social isolation and lockdowns. Also, they got well informed regarding what was going on in the world, in Pakistan and in their own localities. "Had we not been connected with media,

††The director of the Asia Institute (asia-institute.org) and a senior scholar at FPIF.

we would have gone mad in the face of this deadly virus”, a student opined. This finding is identical with Bazarova⁷ (2020) result who found that media discourse served as ‘an antidote to social distancing’ physically away from one another yet connected through media particularly social media.

Also, a new angle regarding long-standing discourse about reinforcing vs. displacing effects of online communication on in-person connections has emerged that supports the view that social media use is to further strengthen in-person contacts, rather than reducing it (Dienlin et al., 2017). Bazarovia (2020) explains that COVID-19 pandemic highlights a different—social compensatory—role of social media. That is to say that when in-person contacts are disrupted robustly not by social media, rather by external forces as this pandemic, it’s online communication, which have proven to be an effective alternative of staying in touch. Malkani (2020), however, cautioned that majority having digital access must try to avoid and that is the recommendation of WHO.

Conclusion

This research was an attempt to carry out a critical analysis of COVID-19 media discourse and its impact on learners. The data revealed that the participants experienced both positive and negative influences of the infodemic in the times of COVID. The positive aspects included their connectivity with the world, their awareness of the emerging situations, staying in touch with their near and dear ones in the turbulent times which further extraordinarily reduced the detrimental impacts of social isolations. The negative aspects, they experienced included conflicting views of people ranging from a layman to the experts, religious scholars and heads of the states. As a result, the students too faced a state of confusion and lack of clear-headedness regarding COVID. It is recommended, therefore, that media outlets need to be very calculated and authentic and follow problem solving approach in the days of crisis while formulating their discourse.

References

- Aijazzuddin, F.S. (2020, March 26). Numbering Death. Dawn Islamabad. Retrieved from: <https://www.dawn.com/news/1543826> on 29 June 2020.
- Ali, N. A. (2020, April 2). Students disappointed with online teaching system amid COVID-19. *Daily Times*. Retrieved from: *The Dialogue*

- <https://dailytimes.com.pk/587446/students-disappointed-with-online-teaching-system-amid-covid-19/> on 30 June 2022.
- American Psychological Association (2020, March 25). Combating Bias and Stigma Related to COVID-19. *APS*. Retrieved from: <https://www.apa.org/topics/covid-19-bias> on 17th April 2020.
- Andrews, E. (2016). The History of the Handshake. retrieved on 31st March 2020 \from: <https://www.history.com/news/what-is-the-origin-of-the-handshak>.
- Bazarova, N. (2020, March 20). Staying Connected Via Social Media in the Age of COVID-19. Retrieved from: <https://www.psychologytoday.com/intl/blog/social-media-stories/202003/staying-connected-social-media-in-the-age-covid-19> on 22 June 22, 2020
- Begley, S. (2020, MARCH 12). 7 reasons why it's hard to control your coronavirus anxiety. Retrieved on 7 July 2020 from: <https://www.statnews.com/2020/03/12/why-coronavirus-anxiety-hard-to-control/>
- Berezow, A. (2020, March 26). COVID-19: The Best (Worst?) Coronavirus Conspiracy Theories. Americana Council of Science and Health. Retrieved on 7th July 2020 from: <https://www.acsh.org/news/2020/03/26/covid-19-best-worst-coronavirus-conspiracy-theories-14664>.
- Birnbaum, M.L.D.M. (2020, March 13). Navigating the Coronavirus and Social Media. *Psychology Today*. Retrieved from: <https://www.psychologytoday.com/us/blog/the-health-our-youth/202003/navigating-the-coronavirus-and-social-media> on 20 April 2020.
- Bomlitz, L. J., & Brezis, M. (2008). Misrepresentation of health risks by mass media. *Journal of Public Health*, 30(2), 202-204.
- Bloor, M & Bloor, T. (2013). *The Practice of Critical Discourse Analysis: An introduction*. London: Routledge.
- Center for Disease Control and Prevention (2020). *Coronavirus Disease 2019 (COVID-19) Situation Summary*. Retrieved from: <https://www.cdc.gov/coronavirus/2019-nCoV/summary.html> on March 2, 2020.
- Chater, N. (2020, March 27). Facing Up to the Uncertainties of COVID-19. *Nature Human Behavior*. Retrieved from: <https://www.nature.com/articles/s41562-020-0865-2> on 21 April 2020.

- Clark, D. (2020, March 3). Media Fear and the Coronavirus Outbreak. *Psychology Today*. Retrieved from: <https://www.psychologytoday.com/us/blog/the-runaway-mind/202003/media-fear-and-the-coronavirus-outbreak> 19th April 2020.
- Concannon, L. (2020, February 14). The Coronavirus: Is Social Media Helping? *Sysomos, Now Meltswater Social*. Retrieved on 7 July 2020 from: <https://blog.sysomos.com/2020/02/14/the-coronavirus-is-social-media-helping/>
- Denscombe, M. (2007). *The Good Research Guide* 3rd ed. New York: Open University Press.
- Dictionary.com (n.d). *Infodemic*. From: <https://www.dictionary.com/e/pop-culture/infodemic/> on 6th August 2020.
- Dienlin, T., Masur, P. K., & Trepte, S. (2017). Reinforcement or displacement? The reciprocity of FtF, IM, and SNS communication and their effects on loneliness and life satisfaction. *Journal of Computer-Mediated Communication*, 22(2), 71-87.
- Driver, G. (2020, April 21). Coronavirus Conspiracy Theories Are Rampant, Here Are the Most Hilarious. Retrieved from <https://www.elle.com/uk/life-and-culture/a31892113/coronavirus-conspiracy-theories/> on 2 July 2020.
- Fairclough, N. (1995). *Critical Discourse Analysis: The Critical Study of Language*. 2nd Ed. New York: Taylor & Francis.
- GARZA, A. D. L. (2020, March 16). How Social Media is Shaping Our Fears of-- and Our Response to--the Coronavirus. *Time*. Retrieved from: <https://time.com/5802802/social-media-coronavirus/> on 19 April 2020.
- India Today Web Desk (2020). Covid-19: How coronavirus is reshaping the education world. *New Dehli*. Retrieved From: <https://www.indiatoday.in/education-today/featurephilia/story/coronavirus-impact-most-education-institutions-not-equipped-to-conduct-online-classes-1665289-2020-04-10> on 30 June 2020.
- Jones, S. M. & Doolittle, E. J. (2017). Social and Emotional Learning. *The Future of the Children*. Retrieved on 8 July 2020 from: https://futureofchildren.princeton.edu/file/986/download?token=WkE8Dw_D

- Kahki, J. (17th April 2020). Virus Assumptions. *Dawn Islamabad*. Retrieved from <https://www.dawn.com/news/1549910> on 29 June 2020.
- Khan, A.I. (2020, April 18). Leadership Matters. *Dawn Islamabad*. Retrieved from <https://www.dawn.com/news/1550154> on 29 June 2020.
- Malkani, A. (2020, April 5). COVID-19 Tech Gaps. *The News International Islamabad*. Retrieved from: <https://www.dawn.com/news/1546525> on 1 July 2020.
- Merriam-Webster.com (n.d). **Infodemic**. From: <https://www.merriam-webster.com/words-at-play/words-were-watching-infodemic-meaning> on 6th August 2020.
- Marker, C., & Aylward, A. (2011). *Generalized anxiety disorder* (Vol. 24). Hogrefe Publishing.
- Mendoza, D. G. (2020, April 13). Stigma around COVID-19 similar to discrimination facing people with HIV, say doctors. *ABS-CBN NEWS*. Retrieved from: <https://news.abs-cbn.com/spotlight/04/13/20/stigma-around-covid-19-similar-to-discrimination-facing-people-with-hiv-say-doctors> on 4th May 2020.
- Nekmat, E & Yue, A. (1st May 2020). How to fight the COVID-19 infodemic: lessons from 3 Asian countries. *World Economic Forum*
- Pastreich, E. (2020, March 16). The Global Media and COVID-19. Retrieved from: <https://fpif.org/the-global-media-and-covid-19/> on 8 May 2020.
- Pinsker, J. (2020, March 17). The People Ignoring Social Distancing. *The Atlantic*. Retrieved on 7 July 2020 from: <https://www.theatlantic.com/family/archive/2020/03/coronavirus-social-distancing-socializing-bars-restaurants/608164/>.
- Prooijen, J. W. (2020, April 10). COVID-19, Conspiracy Theories and 5G Networks. *Psychology Today*. Retrieved from: <https://www.psychologytoday.com/us/blog/morality-and-suspicion/202004/covid-19-conspiracy-theories-and-5g-networks> on 7 May 2020.
- Reader, R. (2020, April 21st). Why Bill Gates is The Focus of the Latest Coronavirus Conspiracy Theories. Retrieved from on 7th May 2020.
- Reich, R. (2020, April 18). Complete Disaster. *The News International*. Retrieved from <https://www.thenews.com.pk/print/645799-complete-disaster> on 29 June 2020.

- Rivera, D. (2020, March 17). COVID-19: Fear and Stigma. Retrieved from: <https://www.voicesofyouth.org/blog/covid-19-fear-and-stigma> on 5th May 2020.
- Salahuddin, G. (2020, March 29). Beyond the Corona Crisis. *The News International* Islamabad.
- Schaeffer, K. (8th April, 2020). Nearly three-in-ten Americans believe COVID-19 was made in a lab. *Pew Research Center*.
- Suttie, J. (2020, March 30). How to be Intentional about Consuming Corona Virus News. *Greater Good Magazine*. Retrieved from: https://greatergood.berkeley.edu/article/item/how_to_be_intentional_about_consuming_coronavirus_newson 19th April 2020.
- The, L. P. (2020). Send in the therapists? *The lancet. Psychiatry*, 7(4), 291. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7103927/pdf/main.pdf> on 4 July 2020.
- United Nations (2020, March 31). Shared responsibility, global solidarity: Responding to the socio-economic impacts of COVID-19." Retrieved from: <https://www.un.org/en/un-coronavirus-communications-team/launch-report-socio-economic-impacts-covid-19> on 28th April 2020.
- USAID (2020, March 30). Disrupting COVID-19 Stigma. Breakthrough ACTION for Social and Behavioral Change. Retrieved From: https://www.thecompassforsbc.org/sites/default/files/strengthening_tools/Stigma%20Guidance%20During%20COVID-19.pdf on 4 May 2020.
- Volkin, S. (2020, April 28). Social Media Fuels Spread of Covid-19 Information—And Misinformation. Retrieved from <https://hub.jhu.edu/2020/03/27/mark-dredze-social-media-misinformation> on 8 May 2020.
- West, D. M. (2017). *How to combat fake news and disinformation*. Brookings Institution. Retrieved on 8 July 2020 from: <https://www.brookings.edu/research/how-to-combat-fake-news-and-disinformation/>.
- Wetsman, N. (2020, March 10). Fearful reactions to the new coronavirus can put lives at risk. Retrieved on 8 July 2020 from: <https://www.theverge.com/2020/3/10/21172988/coronavirus-fear-reactions-virus-ebola-cdc-covid19-panic-precautions>.