

Use of social media by NDMA in Crisis Management: A Case of Covid19 in Pakistan

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Abstract

The present study examines the use of social media handles of NDMA in the crisis management of the Covid19 crisis in Pakistan. The study aimed to examine the Facebook and Twitter content of NDMA on Covid19 and also examine how NDMA gave awareness before Covid19 outbreak and managed the crisis during Covid19 in Pakistan. Furthermore, the study determined which social media platform is more engaging for social media users. The present study uses content analysis as the method for data collection of the study, whereas the Social-Mediated Crisis Communication model provides the theoretical guideline for the study. The results of the study show that NDMA did not use its social media handles to give awareness and manage the Covid19 crisis before its outbreak in Pakistan, but NDMA uses its social media handles to give awareness and manage the Covid19 crisis during its outbreak in Pakistan and mostly used its Facebook handle for giving awareness during the outbreak of Covid19. The Twitter handle of NDMA is more engaging, but this handle is mostly used for management of this crisis by giving information regarding the standard operating procedure for prevention and safety. The Facebook handle is less engaging as compared to Twitter.

Keywords: Crisis, Crisis Management, Awareness, SocialMedia, Covid19

INTRODUCTION

Crises are unexpected and sudden happenings that hold hazard along them and a traumatic time for everyone. It can damage originations, infrastructure, and human life (Rosenthal & Kouzmin, 1993). Communication has transformed after the growth of the internet. The Internet has transported an entirely new approach to communication after the emergent and growth of social media outlets. These outlets offer for their consumers to be interactive, broadcast and consume content more spontaneously (Aula, 2010). During any crisis, every operating system is under a serious threat. Therefore, it is very important to select the best way of communication with the public for managing the situation. Presently, thanks to the development of technology, digital media, which also include social media, is a platform for this (Werliin & Kokholm, 2016). Social media have its threats and potentials in the communication process. On one hand, social media is the fastest tool of communication and, it provides crisis with a novel place to blowout, remains extra impulsive and the capacity to go for the institute fast. (Nekmat, 2014). During any crisis, the consumption of social media for information and communication will increase. In the 2009 Salmonella Outbreak, in the United States, the Twitter handle of the Health and Human Services department has seen a rise in followers and engagement on Twitter content (Hamilton, 2009). So during any crisis, the role of media is very important because people rely more on media for information. Therefore, social media can help during a crisis for its managements. (Nemo 2015).

Currently, Covid19 has become a natural crisis around the world. There are now over 200 million cases and more than 4 million deaths across 215 countries and regions are affected due to the covid19 outbreak and continued (WHO, 2021). As the coronavirus pandemic brings the globe to a shocking pause, most countries are suffering intensifying harm and the world is living a quarantine life. Therefore, everyone is curious and wanted to know the current situation and development of the crisis, as a result of this

curiousness consumption of media is become very high especially social media as we are living in the digital age.

Therefore, it is essential to determine preeminent ways intended for crisis management through social media, which is imperative, and how crisis management organizations have used these new media of communication for the management of the Covid19 crisis. NDMA (National Disaster Management Authority) is a primary organization at the National level that deal with the whole spectrum of Disaster Management activities in Pakistan, and in a crisis of Covid19 NDMA is also working to manage it. The present study explored the use of Facebook and Twitter by NDMA before and during the crisis of Covid19. How NDMA uses these social media platforms creates awareness before the outbreak and as well as how NDMA manage the covid19 crisis in Pakistan with the help of its social media handles. Moreover, how the users of these social media platforms reacted to the content of NDMA, and how much NDMA is successful to engage the users on its Facebook and Twitter handles.

Objectives of the Study

- To examine the coverage of Facebook and Twitter by NDMA on Covid19.
- To examine the coverage of Facebook and Twitter by NDMA in giving awareness before the Covid19 outbreak in Pakistan.
- To explore the usage of Facebook and Twitter by NDMA to manage the crisis during the first wave of Covid19 in Pakistan.
- To determine how social media users, react to NDMA covid19 posts on Facebook and Twitter.
- To examine which social media platform of NDMA is more engaging Twitter or Facebook in the Covid19 case.

LITERATURE REVIEW

A crisis explains as an occurrence that can put the reputation of origination at risk and sometimes life-threatening as well (Jordan, 2011). Further, Ulmer, Sellnow, and Seeger (2011) explain two categories of the crisis first “intentionally caused crises” that can explain as terrorism or disruption, second “crises caused by natural, uncontrollable factors” for example natural disasters, pandemics, floods, earthquake etc. Crisis not only harm human life and cause financial loss but also damage public security, material goods, the psychical and mental health of the public (Xie, Qiao, Shao, & Chen, 2017).

The literature on crisis management is quite developed. Crisis management can explain as a process that precludes and minimize the loss when a crisis occurs that loss can be financial or human life depending on the nature of the crisis (Bernstein, 2011). Many studies propose that the core of crisis management have to control the unpleasant circumstances, also control the confusions during such situation, to minimize the loss financially and human life both, negative publicity, and the image of the organization, through effective preventive action (Bernstein, 2011; Coombs, 2012; Gonzalez & Smith, 2008). Researchers identify the importance of pre-crisis management and plans for the possible crisis will help the organization to fight and overcome the crisis more strongly and positively with lesser damage, comparatively with those who don't have any pre-crisis management plan (Fearn, 2010).

Kwok et al. (2020) explore the users' acceptance of the use of technology in crisis management, the study concludes that the users are accepting the use of new technologies in the crisis management process and they identified that technology in crisis management make the management easier and result oriented. On the other hand, Robert and Lajtha (2002) explore that the use of technology and digital devices make the crisis management process easier but chances of mistakes are also higher in this process while using the modern technologies, therefore systematic

preparation and operative on-ground supervision to the disaster response crews are mandatory to get the error-free results.

Social media is communicating digital tools that allow its users to generate their content, influence the audiences. Social media provides the opportunity to interact and exchange thoughts and ideas through messages among message creators and consumers (Perry & Taylor, 2005; Mitrook& Seltzer, 2007; Wright & Hinson, 2009). The use and the role of social media in crisis and the situations of conflicts has been recognized in many research studies, (Okada, Ishida, & Yamauchi 2017; Hashimoto, Shirota, & Chakraborty 2016; Gurman& Ellenberger 2015; Crawford & Finn 2015). Furthermore, researchers investigate the use of social media in crisis management the key subjective contain situational shreds of evidence (Mark & Seaman, 2008; Oh et al., 2010). Other addresses sense-making and sense breaking (Robinson, 2009; Mirbabaie and Marx, 2020). Furthermore, joint resilience in crisis management through social media is also addressed (Mark &Semaan, 2008), anecdote management is also a subject of crisis management that acknowledges in previous research studies (Mendoza et al., 2010).

The use of Social media rises in the crisis and people rely on social media for immediate and on-ground information regarding crisis (Pew Internet & American Life Project, 2006; Sweetser&Metzgar, 2007; Bates &Callison, 2008;). Similarly, the researchers highlight that social media is a popular medium, user friendly, efficient, and its wild users' range makes it a popular choice of crisis manager for crisis management (Hughes, 2014; Hiltz et al., 2014; Yates & Paquette, 2011 Denis et al., 2014). Social media is a very fast medium of communication, so it provides the facts and ground situation of crisis very quickly and increases the speed of information exchange. However, this speed also increases the chances of misinformation. (Jordan, 2011). Similarly, Sell, Hosangadi and Trotochaud1(2020) during the crisis the flow of information becomes very fast and huge information is present on

the social media-related crisis in which misinformation and wrong facts are also presented that creates panic and fear among the users of social media. Similarly, the misinformation and the quality concerns on the social media content and information is pointed out but no solution is generated to control this misinformation on social media that creates panic among the masses (Alexander, 2014; Chung, 2011).

In the present age of digitalization, an organization cannot only rely on traditional media for crisis management. Therefore, they use both medium tradition and digital for crisis management (Fearn&Banks, 2010; Coombs, 2012; González, Herrero & Smith, 2008). Yates and Partridge (2015) identify that social media has the potential to develop a community for crisis resilience that promotes opinions and ideas regarding public participation in any crisis, to manage the crisis, and minimizes the damage (Yates & Paquette, 2011). Kim (2014) social media in social crisis and natural disasters is quite helpful for the distribution of up-to-date facts and a good and fast source of disaster communication which is helpful in the management process also. Similarly, researchers also explore in what way social media, precisely the two major social networking sites (Facebook & Twitter) contributed in particular crisis conditions, for example, Shklovski et al. (2010) examine the 2005 Hurricane Katrina distastes, Oh et al. (2011) examines the 2009 Mumbai attack in India and Hjorth and Kim (2011) examines that the improvements in social networking sites did transform the crisis management process, from share factual information to the relief and recovery process the social media is very helpful and useful. Furthermore, social media is not only the source of information for common people but also for crisis management organizations they also collect initial information regarding crisis, conditions of victims, and essential for relief and rehabilitations (Abbasi et al., 2011). In some crises, the terrestrial network is not working due to the damage of infrastructure. In these cases, social media plays a vital role in sharing information and communication which facilities in the relief and rescue process

(Sutton et al., 2008; Yates & Paquette, 2011; Ngamassi et al. 2016). Researchers have not negated the significance of social media for crisis management, although they identify that social media is not used effusively it seems that social media is still under-utilized in crisis management (Denis et al., 2014; Robinson, 2009; Mark &Semaan, 2008 Oh et al., 2010). The researcher identifies that social media in a natural crisis is a developing area of investigation, and the researchers from emergency management, disaster management, media studies, and computers sciences are investigating this phenomenon (Fraustino, Liu &Jin, 2012; Bruns et al. 2012). Many studies have observed the common public participate in crisis communication and crisis management in different ways on social media during any natural (Hughes &Palen, 2009; Nager et al., 2012).

Pakistan is a developing country and as every developing country surfed from many crises let have a look at the literature on crisis and crisis management in Pakistan, Naveed (2019) explore that Pakistani mainstream media and disaster management originations are working quite well to manage the natural disaster (flood) in Pakistan. The crisis management and communication system are working well to save the human life in times of floods in Pakistan. On the contrary Khan and Khan (2008) find out that the crisis management in Pakistan mainly turn around flood crisis only and their main concern is relief and rescue. The crisis management organization is not working on pre-crisis management, planning, and prevention that leads to the huge loss in every crisis in Pakistan with financialand human life loss. Similarly, Tariq and Giesen (2011) analyzed the natural crisis floods and their management in Pakistan, study identify that this management needs a better understanding of the problem because the nature of floods occurrences is changing because of many reasons, but the current approach to deal with this crisis is not sufficient to control it and overcome its damage. Ahmed (2013) explores the strategies and practices of crisis management in Pakistan, the study finds out that the disaster management act in Pakistan majorly focuses on

building a plan and institution that vindicates crisis in the country. This act is not focusing on planning and prevention which reduces the crisis and well manages the crisis which leads toward minimum losses.

Presently the world is suffering from an infectious disease pandemic named Covid19 currently over 200 million cases and more than 4 million deaths across 215 countries and regions are affected due to the covid19 outbreak and continued (WHO, 2021). Yang, Bin, and Jingwei (2020) find out that students in Wuhan were facing mental stress due to this diesis but proper personal sanitization and hygiene practices create positive behaviors among the students. Students were depending only on government sources for information that provide the most transparent and genuine information without creating any panic. On the other hand, Wen et al (2020) the western media is giving biased coverage to this issue and labeling this virus and promoting racism by calling this “Chinese virus pandemonium” this bias is creating troubles for the Chinese’s living abroad and affecting their mental health. Rafi (2020) explores the misinformation on Covid19 on social media and people’s discernment on them, during the crisis of Covid19 there is a huge amount of misinformation regarding the virus present on social media which creates panic and fear among the masses. Similarly, Pennycook et al., (2020) social media is full of misinformation regarding Covid19, and users of social media are poorer at discriminating between right and wrong information and they share all kinds of information. Gao et al., (2020) during the lockdown period people are more exposed to social media comparatively before the lockdown period which leads to mental health issues like depression and anxiety. Researchers also find out the reasons for failure in controlling Covid19 crisis Mirvis (2020) in the United States lack of pre-crisis management and communication, less coordination of different crisis management departments, weak test system, and management challenges are the major reason that the US is failing to manage this crisis and face a huge loss in this, especially human life loss. Similarly, Ilyas et al.,

(2020) in Pakistan, that the destitution, poor management, poor financial condition, illiteracy, natural environment, bad hygienic, low nutritious food, weak health department are some of the major's challenges that make a harder to control Covid19 crisis in Pakistan. There is a lot of studies conducted on crisis management and unfold various aspects of this area that explains the importance of pre-crisis management and communication, the importance of digital media is this process, the dependency on social media form information during a crisis and after the use of social media crisis management process becomes a two way of communication. However, the present study is examining the use of social media by NDMA in crisis management and the reaction and engagement of common users of social media on NDMA social media handles (Facebook & Twitter). The study explored the potential of social media by way of an operative means for crisis administration during a natural crisis like the current outbreak of Covid19 in Pakistan.

THEORETICAL FRAMEWORK

The Social-Mediated Crisis Communication model explains a structure or plan for the issue and crisis managing in a promptly developing media backdrop (Austin &Jin, 2016). The SMCC model is the initial theoretic model that discusses the use of social media in crisis management and communication in every short of crisis (Jin& Liu, 2010; Austin, Liu &jin 2012,). The Social-Mediated Crisis Communication model explains authentic strategies to guide that crisis correspondents on when and how to retort on social media, whereas also admitting the impact of customary mass media and offline mediums of communication (Austin &Jin, 2016).

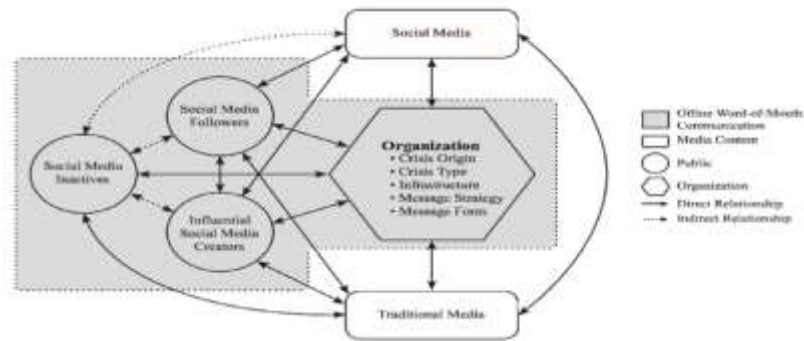


Figure 1. Social-Mediated Crisis Communication model (Jin, Liu, & Austin, 2014).

The Social-Mediated Crisis Communication model explains unique communication prospects for organizations in crisis. The model explains that social media is a tool for crisis management because crisis managers can use social media not only as a medium of communication but is also a source and origin of information for the crisis on which the public can get engage express their opinion and react on them so in this way crisis managers and the public are direct communication and express the problem and obstacle in overcoming the crisis, which ultimately helps in managing the crisis. Therefore, the present study explored how NDMA uses their social media platforms (Twitter, Facebook) to manage the crisis of Covid19 in Pakistan and how the common public obtains and reacts to their efforts on their social media handles, so this model provides a guideline to the present study.

Research Question

RQ1. How NDMA uses its Facebook and Twitter handles to give awareness and manage the Covid19 crisis before its outbreak in Pakistan?

RQ2. How NDMA uses its Facebook and Twitter handle to give awareness and manage the crisis during the first wave of Covid19?

RQ3. How social media users, reacted to NDMA Covid19 post on Facebook and Twitter?

RQ4. Which social media platform (Facebook or Twitter) of NDMA is more engaging?

Hypotheses

H1. NDMA did not use its Facebook and Twitter handles comprehensively to give awareness and manage the Covid19 crisis before its outbreak in Pakistan.

H2. NDMA comprehensively uses its Facebook and Twitter handle to give awareness and manage the crisis during the first wave of Covid19.

H3. Social media users more actively reacted to NDMA Covid19 posts on Twitter than on Facebook

H4. Twitter handle of NDMA is more engaging than Facebook handle.

METHODOLOGY

The Present study uses content analysis as the method, the researcher conducted the content analysis of NDMA's Facebook and Twitter posts. The universe of the study is the social media handles (Facebook and Twitter) of NDMA. The sample of the study is every post of Covid19 on the social media handles of NDMA (Facebook & Twitter). In the study, the researcher used the time duration to define the sampling frame of the study which is from January 2020 till August 2020. January 2020 till February 2020 were taken as before the duration of the outbreak and from March 2020 till August 2020 were taken as during duration of Covid19. The unit of analysis of the present study is the post of NDMA's Facebook and Twitter related to Covid19. The categories of the data have gone for prior coding the data collection; three major categories are defined in the study are A: Management, B: Awareness, C: Others. The researcher used three BS (Hons)

students as the coder of the study to maintain the inter-coder reliability of the study and the researcher has employed SPSS to analyze the data and carry out the cross-tabulation and Kruskal-Wallis test to test the hypotheses.

FINDINGS AND DISCUSSION

Table 1: Reaction of Public on Facebook Posts of NDMA on COVID 19

Reaction on Covid-19 Posts			Types of
Like	Share	Comment	Total
Facebook 5211 (68.6%)	2123 (27.9%)	264 (3.5%)	7598(100%)

During the selected eight months there were a total of 217 posts by NDMA related to Covid19 on its Facebook handle in which 69% were liked, 28% were shared and 4% have received a comment from Facebook users.

Table 2: Reaction of Public on Twitter Posts of NDMA on COVID 19

Reaction on Covid-19 Posts			Types of
Like	Retweet	Comment	Total
Twitter 36128 (82.3%)	674 0 (15.3%)	1055 (2.4%)	43923 (100%)

During the selected eight months there weretotalof 168 posts were made by NMDA related to Covid19 on its Twitter handle in which 82% were liked, 15% were retweeted and 3% have received a comment from the Twitter users.

Table no 3: Cross-Tab of Type of post on social media handles of NDMA before Covid19

			Types of post		Total
			Management	Awareness	
Social media	Facebook	Count	4	6	10
		% of Total	22.2%	33.3%	55.6%
	Twitter	Count	0	8	8
		% of Total	0.0%	44.4%	44.4%
Total		Count	4	14	18
		% of Total	22.2%	77.8%	100.0%

The cross-tabulation of the type of post on both social media handles (Facebook & Twitter) of NMDA before its outbreak in Pakistan results show that there is a total of 18 posts related to Covid19 on the social media handles of NDMA. During the time of two months, NMDA posted only fourteen posts on both handles to create awareness to Covid19 and only four posts to the management of the Covid19 crisis. The results show that NDMA did not use its social media handles to create awareness and manage the Covid19 before its outbreak in Pakistan, therefore there is a lack of preemptive action to manage and control this crisis from NDMA.

Table no 4: Cross-Tab of Type of post on social media handles of NDMA during Covid19

			Types of post			Total
			Management	Awareness	Others	
Social media	Facebook	Count	92	90	27	209
		% of Total	25.1%	24.5%	7.4%	56.9%
	Twitter	Count	90	23	45	158
		% of Total	24.5%	6.3%	12.3%	43.1%
Total		Count	182	113	72	367
		% of Total	49.6%	30.8%	19.6%	100.0%

The cross-tabulation of the type of post on both social media handles (Facebook & Twitter) of NDMA during its outbreak in Pakistan shows that there is a total of 367 posts related to Covid19 on social media handles of NDMA. During the time of six months, NDMA posted one hundred and thirteen posts on both handles regarding creating awareness to Covid19 and one hundred and eighty-two posts to manage the Covid19 crisis. The results show that NDMA uses its social media handles to create awareness and manage the Covid19 during its outbreak in Pakistan, therefore NDMA utilizes both social media handles during the outbreak of Covid19 in Pakistan to manage this crisis and aware the public regarding this crisis.

Table no 5: Social media reaction to Covid19 post on NDMA social media handles

Twitter Rank	N	Mean
Like		7473
Facebook	3819.48	
Retweet		110

	2605.00	
	Comments	15
	2605.00	
	Total	7598

$X^2 = 57.46, df = 2, p = .000$

A Kruskal-Wallis test showed that there was a significant difference in social media users' reaction to NDMA Covid19 post on Twitter than Facebook, $\chi^2 = 57.460, df = 2, p = 0.000$, with a mean rank reaction score of 3819.48 for like, 2605 for retweet, 2605 for comments, which shows that hypothesis is supported by data.

Table no 6: Social media platform of NDMA is more engaging

Twitter Rank		N	Mean
	Management	94	82.02
Facebook	Awareness	28	68.25
	Other	46	99.46
	Total	168	

$X^2 = 9.75, df = 2, p = .008$

A Kruskal-Wallis test showed that there was a difference in the social media Handles (Facebook and Twitter) of NDMA in terms of engaging social media users but the difference is not significant $\chi^2 = 9.765, df = 2, p = 0.008$, with a mean rank reactions score of 82 for management, 68 for awareness, 99 for others, which shows that hypothesis was not supported by data.

The present study explores an insight into the use of social media handles Facebook and Twitter by NDMA for giving awareness and managing the crisis of Covid19 in Pakistan. The researcher examined how NDMA uses its social media handles to create awareness and manage the Covid19 crisis before its outbreak in

Pakistan. To manage and handle any crisis the preemptive actions are very important, according to Coombs and Hollady (2012) explain a methodology unfolding crisis management as three stages or steps, first is the preemptive crisis action, which includes the awareness, prevention, information and preparation for the crisis. Then the second step is the crisis in which action and response are important than the third and the final stage is post-crisis, in which crisis managers seek out the learning from the mistakes done in the crisis managing process and revise the action plan for the future. The Covid19 crisis hit the world in December 2019 and spread very rapidly in the mid of December 2019 it was clear that this is a respiratory syndrome and spread very fastly, furthermore the most dangerous fact for Pakistan is the epicenter of is a respiratory syndrome in the neighboring country of Pakistan (China), so the preemptive action to manage this crisis is much needing. The type of crisis and efforts of the stakeholders are interconnected and they affect the situation to manage it or make it worst. Therefore, understanding the crisis of nature is very important to control them, and the nature of this quite clear that Covid19 respiratory syndrome is a contagious disease and spread very rapidly, therefore the preemptive action specially create awareness for preventions is very important.

Researchers identify the importance of pre-crisis management and plans for the possible crisis will help the organization to fight and overcome the crisis more strongly and positively with lesser damage, compared with those who don't have any pre-crisis management plan (Fearn, 2010). Researchers have not negated the significance of social media for crisis management, although they identify that social media is not used effusively it seems that social media is still under-utilized in crisis management (Robinson, 2009; Denis et al., 2014; Mark & Seaman, 2008; Oh et al., 2010). Similarly, the result of the present study shows that NDMA did work much on the pre-crisis management but they did not use their social media handles to create awareness regarding Covid19 see table number one, NDMA post only eighteen posts on both of its

social media handles before the outbreak of Covid19 in Pakistan, in two months (January & February) NDMA a total of fourteen posts on both of its social media handles to create awareness regarding Covid19 and only four posts regarding managing this crisis. Technology and social platform play an important role in crisis management according to Kwok et al. (2020) the use of technology in crisis management make this process very easy and effective, the users are accepting the use of new technologies in the crisis management process and they identified that technology in crisis management makes the management easier and result-oriented, therefore NDMA did not utilize its social media handle in pre-crisis management to manage this crisis. Consequently, the results of the present study supported hypothesis one of the present study that NDMA did not suggestively use its Facebook and Twitter handles to create awareness and manage the Covid19 crisis before its outbreak in Pakistan.

The use and the role of social media in crisis and the situations of conflicts has been recognized in many research studies, (Okada, Ishida, & Yamauchi 2017; Hashimoto, Shirota, & Chakraborty 2016; Gurman& Ellenberger 2015; Crawford & Finn 2015). The use of Social media rises in the crisis and people rely on social media for immediate and on-ground information regarding crisis (Pew Internet & American Life Project, 2006; Sweetser&Metzgar, 2007; Bates &Callison, 2008 ;). Similarly, the researchers' highlight that social media is a popular medium, user friendly, efficient, and its wild users' range makes it a popular choice of crisis manager for crisis management (Denis et al., 2014; Hiltz et al., 2014; Hughes, 2014; Yates & Paquette, 2011). Studies show that during the time of crisis people rely on social media for information awareness and get knowledge regarding its managements, therefore, crisis manager or crisis management organization uses this platform active because this platform changes the crisis management process. A two-way communication social media provides a communication link among crisis response organization, media, and public. Yates and

Partridge (2015) identify that social media has the potential to develop a community for crisis resilience that promotes opinions and ideas regarding public participation in any crisis, to manage the crisis and minimize the damage. The result shows that NDMA uses its social media handle during the Covid19 crisis in Pakistan to manage this crisis and create awareness regarding this crisis, during the time of six months (March 2020 to August 2020) NDMA posted a total of 359 posts on both social media handles see the table number two, the posts are related to information, prevention, precautionary measure, to aware the public regarding the seriousness of this crisis and how they can protect themselves. Furthermore, posts are related to receiving and distribution of relief fund, essential equipment, for the public and front link workers, medicines and essential medical equipment's establishes and maintaining the treatment center around the country, the test and treatment facilities, also NMDA address the misinformation regarding Covid19 which creating panic among the public they provide the authentic information and aware the public to avoid the panic. During the first wave outbreak of Covid19 in Pakistan NDMA posted a total of one hundred and sixteen posts on both of its social media handles to aware the public and one hundred and eighty-two posts which are related to managing this crisis see table number two. Therefore, the results of the present study have supported hypothesis two of the study that NDMA significantly uses its Facebook and Twitter handle to create awareness and manage the crisis during Covid19.

After the emergence of social media and the internet crisis management is not an on the way communication process, the public reacts and interacts through social media with the crisis management organization and they also received a direct public reaction to the management process which helps them to make this process more effective. During syndrome epidemics, social networking sites have become the source of immediate information for the common public they not only get information from there but also share such information with their friends and family (Jang

&Paek, 2019). Shklovski et al. (2008) examine how the public uses ICT during any natural crisis by examining the case of the Southern California wildfires of 2007. The study finds out that ICTs provide new ways to communicate during any emergency which help them to discuss and identify the problem in the crisis no matter where their physical presences are they can connect with their community through ICT and raise their voices for their community. Similarly, many studies have observed the common public participate in crisis communication and crisis management in different ways on social media during any natural (Hughes & Palen, 2009; Nager, 2012). Furthermore, Fraustino et al., (2012) explore the reason for using social media during any natural crisis researcher identify that three diverse segments of using social media during any natural crisis firstly to become strong social media content creator with a stronger influence, secondly, increase followers on the social platform, thirdly become an active member of social media.

Therefore, the present study also explores which social media handle users more actively reacted to NDMA Covid19 posts, the results show that social media users actively reacted to the social media posts of NDMA see table number three and four, and they explain the complete detail of social media users' reactions on NDMA's posts on both handles. Furthermore, the present study also explores that social media users more actively reacted to NDMA Covid19's post on Twitter than on Facebook, see table 7 that explains the significant difference in the users' relations on both handles. Consequently, the results of the study supported hypothesis3 of the study that social media users more actively reacted to NDMA Covid19 posts on their Twitter handle than on their Facebook handle.

With the use of social media crisis communication is no more a one-way process of communication, now this process involves the direct reaction and interaction of the receivers, therefore, these social media handles are engaging the public. Rafeeq and Jiang

(2020) explore the social media uses engagements and responded to the crisis information on social media, study finds out that social media users get engaged and respond to crisis information or news in starting days of the situation and as days pass the interest in crisis news or information of social media users become faded. On the other hand, in some crises, the terrestrial network is not working due to the damage of infrastructure. In these cases, social media plays a vital role in sharing information and communication which facilitates in the relief and rescue process and the public get to engage with social media for crisis information and management (Sutton et al., 2008; Yates & Paquette, 2011; Ngamassi et al. 2016). Therefore, the present study also explores that which social media handle of NDMA successfully engages the public. The results show that the Twitter handle of NDMA is more engaging than Facebook handle see table number eight, but there is not a significant difference. Therefore, the results of the study have not supported hypothesis four. Social media users actively reacted and involve in the communication process on the Twitter handle of NDMA rather than on their Facebook handle.

According to data available in January 2021 show that NDMA Facebook handle has 9,006 followers and its Twitter handle has 46,231 followers so there is a huge difference in the followers of both handles which is the obvious reason for the Twitter handle is more engaging than Facebook handle furthermore the Facebook handle of NDMA is created on September 2019, on the other hand, its Twitter handle is created in April 2015, so these are the two major reasons that make the Twitter handle more engaging than the Facebook handle. Consequently, the results of the present study have not supported hypothesis four of the study that the Twitter handle of NDMA is engaging than Facebook handle, and engage with the public in the crisis management process but the difference is not significant.

CONCLUSION

Social media has become the most used and active way of information, communication, and awareness in the present age, this communication tool has transformed after the growth of the internet. The Internet has transported an entirely new approach to communication after the emergent and growth of social media outlets. These outlets offer for their consumers to be interactive, broadcast, and consume content more spontaneously. Social media's popularity increased in the last couple of years which has also taken significance with it for crisis management. Previously crisis management was done through traditional media, but social media give it a whole new approach to crisis management. New media devices are being used in it that pressure upon the speedy broadcasting of information through social media. During any crisis, the consumption of social media for information and communication has increased and the reciprocal nature of social media has converted the crisis communication landscape

So during any crisis, the role of media is very important because people rely more on media for information. Therefore, social media can help during a crisis for its management. Social media have their threats and potentials in the communication process. On one hand, social media is the fastest tool of communication and in contrast, it provides crisis with a novel place to blowout, remains extra impulsive, and the capacity to go for the institute fast. The public grows steadily dependent upon social media during any unexpected events and crises, it turns out to be perilous for crisis management organizations and responders to recognize the distinctions adjacent to their usage. There is an increasing tendency where workers impulsively discriminate among common facts and that geared by precise locations concluded the use of particular hashtag terms.

Covid19 has become a natural crisis around the world. There are now over 43 million cases and more than 29 million deaths across 215 countries and regions that are affected due to the covid19 outbreak and continued. NDMA (National Disaster Management

Authority) is a primary organization at the National level that manage the whole spectrum of Disaster Management activities in Pakistan, and in the crisis of Covid19 NDMA is working to manage it. NDMA has performed their crisis management strategies of Covid19 on their social media platforms (Twitter, Facebook), but they lack in using social media in pre-crisis management and awareness they did not utilize its social media handle in pre-crisis management to manage this crisis, but they use these handles during the outbreak to manage this crisis and aware the public about its seriousness. NDMA is quite successful in engaging the social media users on the communication of Covid19 on their social media handles which indicates the successfulness of the communication process. Social media users are getting engaged with them and actively reacting to their social media posts related to Covid19.

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