COVID-19 Awareness through Visual Communication: A Comparative Analysis on the Facebook Pages of NGOs and Media in Bangladesh

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ABSTRACT

This study aims to present a comparative analysis on the nature and characteristics of visual awareness messages disseminated through Facebook pages of NGOs and media at the very beginning of the COVID-19 outbreak in Bangladesh. A total number of 242 video and 116 image contents have been collected from three media and three non-governmental organizations and examined through their total received views and reactions. The findings show that the contents of media received more views and reactions than the contents of non-governmental organizations (NGO), whereas the NGO’s contents were more diverse than media contents. Among the awareness-building contents explainer video, infographic video and image, and videos with the presence of celebrity received higher views and reactions than others.

Keywords: visual communication, COVID-19, awareness, media, NGO, visual content, Facebook, Coronavirus
INTRODUCTION

In this age of the 4th industrial revolution, most people are connected, and life can largely be defined as a multi-way communication system where each of us is contributing and building a virtual world. But on the journey to this age of information technology, we had to face and tackle many epidemic and pandemic diseases. If we count from the 20th century, we struggled with Spanish flu, HIV/AIDS, Ebola virus, Zika virus, etc. and in the 21st century, we are combating the COVID-19. We were able to mitigate early pandemics and epidemics through building mass consciousness and those consciousness-building campaigns were largely dependent on the media, mainly newspapers at that time. The promotion of washing hands frequently, avoiding crowds, and wearing masks were popular in newspapers at that time. In October 1918, an advertisement about the Red Cross of the Berkeley, California, Daily Gazette expressed that gauze masks were “99% proof against influenza,” and that anybody not wearing a mask was a “dangerous slacker.” (Haynes, 2020). Now for building public consciousness media houses and Non-governmental organizations (NGOs) are working as always.

In this digital age to fight against a new pandemic like COVID-19, the most important work is to build public awareness. Most of the media and NGOs are working to make people concerned about the deadly Coronavirus. In this era of the global village, people are more connected with each other through social media. Nowadays people spend a great deal of time on popular social media like Facebook, Twitter, and YouTube, etc. So, to create public awareness about any issue social media campaigns have become important. Almost every media, NGOs has their own official social media account and publish their news, views, and activities through these platforms.

In Bangladesh, about 58.4% of the total population out of 160 million uses the internet and more than 30 million people use Facebook (“Asia Internet Stats by Country and 2020 Population Statistics” n.d.). Almost all Bangladeshi media houses, NGOs have their official Facebook pages. For fighting against COVID-19, Facebook pages of different media houses and NGOs are working for building consciousness in diverse ways. But the techniques should be innovative and more engaging so that the audience can feel and work according to the delivered message. In Descartes’ Error, Damasio (1994) argued based on neurological evidence that humans are not primarily thinking beings who also feel but feeling beings who also think. (Grabe, 2020, p. 60)

Facebook page is a platform where text, pictures, audio, video, etc. can be uploaded and shared among others. Visual communication has reached a unique height after this platform became so popular. Visuals are more communicative than any other way of communication. Gazzaniga (1998) said that brains were not built to read. Reading is a recent invention of human culture. For this reason, many people have trouble with the process and why modern brain imaging studies show that the brain areas involved with reading move around a bit. Our brains have no place devoted to this new invention. (Barry, 2020, p. 14-15)
So, Communicating visually is more effective than reading written material. Bangladeshi media houses and NGOs have also used this technique of visual communication. A comparative analysis of visual communication among Facebook pages of different media houses and NGOs has been done to understand the ways and techniques they have used to make people aware of COVID-19.

LITERATURE REVIEW

Creating health awareness through visuals has become a trend in Bangladesh. Media and NGOs are working in innovative ways. Mainly the dimension of the usage of images has been changed. As we can see from an article, it was the invention of lithography in the 19th century that allowed for mass distribution of images on calendars, maps, posters, and in advertisements in mass circulated magazines. But in the 20th century, visual communication came into its ascendancy. We now watch more than we read. We are firm during a time of the visual. (Josephson, Kelly, & Smith, 2020, p. xviii)

It is also true that without visual communication recent progress of the media industry would not be possible. In many respects, the study of mass communication today is the study of visual communication. Yet, in journalism programs, visual communication remains narrowly defined. Theories and methods for analyzing the increasingly ubiquitous juxtapositions of electronic and photographic images and words jostling across the television screen are still not a central concern for most academic programs. We can no longer afford to pretend that the study of television news is separable from the study of photographic image-mak ing, or that the study of advertising occupies a separate “track” from the study of visual representation (Griffin, 1991). Visual communication has already been deep-rooted in every communication sector and with the help of technology newer dimensions are being added day by day.

The concentration needed for understanding an article is very high but in visual messages, we can easily understand any message. We can see infographics and explanatory journalism is becoming popular among people. Information should be delivered in the easiest way possible. Media platforms are making more and more visual messages than any other time. Graphics, cartoons, interactive videos are being made by almost all media houses and also shared on Facebook and other social media platforms.

Additionally, quantity does not always mean relevance. This is very much true for visual data. There may be just one picture of an important event. And for the picture’s uniqueness, it could be more expressive and immersive than 1000 photographs of a regular happening that all look alike. So, the more precisely the researcher formulates the research interest, the more accurately the main unit can be identified and the more reliable the results will be. (Bock, Isermann, & Knieper, 2011, p. 267)

Visual contents should be visually soothing and brain hammering. In his book on visual communication Paul Martin Lester says that it is the brain—not the eyes- that understands visual messages. Therefore, considering how the mind processes the visual information it receives from the eyes is vital. The brain processes images as four visual perception cues (color, form, depth,
and movement) knowing how the brain divides and sorts visual messages will help you create images that take advantage of the fact. And theories further refine our understanding of why some pictures are remembered but most are forgotten. Knowing how we see explains why we see. (Lester, 1995, p. 33)

In an article acknowledging the changing trends of technologies, Michael Griffin said that the earliest book to make prominent use of the term is William Ivins’ Prints and Visual Communication, published after more than a decade of preparation in 1953. In this book, Ivins traces the development of what he calls, “the exactly repeatable pictorial statement,” not to chronicle the great artists and artistic styles of successive eras, but with the intent of examining changing technologies and techniques for multiplying images. Thus, his work represents one of the first attempts to shift the study of pictorial reproduction from an exclusive concern for art and art history to a concern for the impact of image production on communication and knowledge. (Griffin, 1991)

Visual communication has made its position stronger in this COVID-19 stay-home period. About 78% of Americans believe that visual elements allow them to express emotions in ways that messaging with words does not. (Lewinski, 2020)

The World Health Organization (WHO) also gave suggestions for making any awareness campaign on COVID-19 visually. As per WHO’s perception, communicators progressively share health data through visual methods, like YouTube videos, photos, infographics, graphs, and charts. WHO said that visual messages make their data more obvious and can contact individuals of all proficiency and education levels? Communicators can expand their capacity to comprehend WHO’s messages by giving specialized data delineations and pictures, so it becomes more clear. By clarifying sequences, timelines, and relationships with drawings to show the steps in a process and including images and graphics in social media content, communicators can encourage the target audience to share messages through their social media networks, increasing the circulation of easy-to-understand content. Data illustrations and other visual portrayals of figures and realities assist individuals with understanding data by supplementing or replacing text with pictures. WHO recommended that communicators can add designs and GIFs (a progression of short animated pictures) to online media messages to build clicks and sharing. Incredible GIFs commonly use small amounts of data to simplify sharing. Great GIFs utilize generally modest quantities of information to make sharing simpler. They center around one principle thought instead of a great deal of detail. It's feasible to improve narrating with photographs and catch consideration with innovative print materials. (“Make it visual,” n.d.)

We can see similar findings on political campaigns from other research. A study on advertising shows that visual messages are an important part of presenting clear messages, specifically in political issue advertising, because the visuals provide an emotional connection to the viewer/voter. (Cindy, 2011)

Research conducted on HIV/AIDS campaign says that Visual semiotics relies upon such picture devices like the picture, image, non-verbal communication, celebrity figure, colors,
expression, gesture, and the reciprocal role of the accompanying graphics to get the ideal reactions from readers. The idea of using “healthy-looking” characters is one of the most appealing aspects of the advertisement. This is also the most sanitized version of HIV and AIDS in newspaper advertisements. Positive advertisement promises reward, hope, morality, and celebrity status that largely help to create memorability and general appeal of advertisements. And changed behavior emerges only from a sense of self-worth, which the current advertisement promotes. (Benard & Felicia, 2015, p. 14-15)

Along with medical aid in the COVID-19 pandemic situation, visual aid has become another important help for any nation to flatten the curve. In research on the picture of a pandemic, it is found that the power of visual language as a valuable and versatile currency to facilitate public health advocacy, close critical health literacy gaps, and inspire socially responsible action among all patient communities must be properly utilized to fight against this pandemic. (Hamaguchi et al., 2020, p. 485)

Strategically visual message building is very important to communicate effectively. The receiver of the message may be from any age or educational background. Any visual communicator should consider the 5Ws before spreading any message. And the clarity of the visual message is also very important for being effective. It must be understandable. The messages should be simple. In many health awareness campaigns, visual messages fail because of their non-defining and unplanned nature. Also, if the quality and relevance are not up to the mark then the message can be failed. In research, only nine out of the twenty images assessed adequately conveyed the correct message to the intended audience. It was found that the images were simple and iconic with a touch of humor. The front cover relied on a text for full understanding. The audience responded well. The topic and the message of the leaflet were clearly understood, regardless of any text. They could relate to all the images appreciating the style and colors used. The content was considered acceptable to all cultures (Finan, 2002, p. 21). Effective message building isn't an easy task. Scrupulous work had to be done before making any visual message public because if the message doesn't work properly it may cause harm to society. As in an article, it says that a truly integrated approach is needed that goes far beyond what is routinely understood by the craft of communication. It’s not a separate body of expertise that comes at the end (designing materials) or the beginning (the immediate and standard solution to a problematic situation), nor the exclusive domain of art directors, copywriters, or other communication professionals (Pauwels, 2015, p. 252). So, diversified and easy-to-understand visual message building is very much necessary.

In their research on the role of comics in public health communication during COVID-19 Kearns and Kearns (2020, p. 9) suggested that collaboration between experts of science and artists skilled in science communication is key to successfully harnessing this medium in the health strategy. They found in their research that comics are frequently used as a vehicle to present science in graphic narratives, harnessing the ability of visuals, script, and storytelling in a memorable and engaging format. (ibid. p. 9).
During the worldwide emergency of COVID-19, visual communication tools proved to be important in spreading the message and simplifying critical theories, engaging the general people in behavioral change, constructing a greater sense of collective responsibility, and facilitating health communication in an era where digital medium rules. (Saraiva & Ferreira, 2020, p.441)

So, visual communication is a very useful tool for making any scientific or hard-to-understand topic easier. The research aims to dig out how and to which extent the media of Bangladesh used visual communication as a tool and way of building COVID-19 awareness.

RESEARCH OBJECTIVES

There were three objectives while conducting this research. Those are given below:

- Digging out, how the traditional media and the NGOs in Bangladesh are performing their social responsibility through awareness-building visuals on their respective Facebook pages.
- Finding out the different categories of visuals on Facebook.
- Getting an idea of the contents that get more public reception and engagement than others.

THEORETICAL FRAMEWORK

Information Deficit Model

For discussing and analyzing this research, the Information or Knowledge deficit Model or simply Deficit Model is being used. This model originated by social scientists in the 1970s in the context of a discussion about science and technology with the public. The thinking was that if the potentially skeptical public is informed about science and technology, they will be more welcoming and accepting of science and technology in their life (Miller, 2010). This theory mainly discusses the ways of science communication with the general public who isn’t familiar with any scientific knowledge along with scientific public health communication. So this theory will help in analyzing the communication pattern for creating awareness among the mass people of Bangladesh.

In this work, this approach is used to comprehend the visual communication process of the contents shared in Facebook Groups of aforementioned Media Organizations and NGOs.

Sampling

In this research, Facebook pages of different NGOs and media houses have been purposively selected to identify what they have done visually during the corona pandemic to aware people. A purposive sample is chosen with the knowledge that it is not representative of the general population; rather it attempts to represent a specific portion of the population (Wimmer and Dominick, 1987). Data like posters, videos, infographics, etc. are collected from 8 March to 8 May 2020 from Prothom Alo, BBC Bangla, Bdnews24.com, UNDP Bangladesh,
BRAC and Save the Children in Bangladesh Facebook pages. And the total number of reactions and views was counted till 18th April of 2021.

**METHODOLOGY**

**Visual Content Analysis**

Visual content analysis is used as the main method of this research. Quantitative content analysis is an empirical method for the systematic analysis of well-defined, audio, textual, visual, and/or audio-visual media content (Krippendorf, 2003).

Quantitative content analysis is a highly standardized method that is used to provide ‘objective’ or intersubjective replicable and valid results. The strength of this method is its ability to reduce the visual material to a small number of codes, which can be counted and analyzed mathematically or statistically. This visual content analysis method can be used to deal with a large amount of visual data, which allows generalizable predictions to be deduced from the research material. (Bock, Isermann, & Knieper, 2011, p. 266)

By ‘visual content’ it means graphic images such as photographs, moving images, paintings, drawings, and sculptures (Mitchell, 1987).

Visual content analysis can be characterized as a precise, observational technique that is utilized for testing hypotheses about how the media represent people, events, situations, and so on. This method can be used for the quantification of samples of observable content classified into particular categories. (Bell, 2001, p. 14)

Visual content analysis can address the inquiries of whom or what is addressed by the media and check the number of appearances of actors or themes using frequency analysis. By focusing simply on certain aspects of the visual messages, this method can be utilized to lessen the complexity of media content. (Bock, Isermann, & Knieper, 2011, p. 266)

**FINDINGS**

This research has examined verified Facebook pages of three media houses and three NGOs from 8 March 2020 to 8 May 2020. Total 358 contents were found where 159 were found on the Facebook page of media houses and 199 on NGO Facebook pages. So we can see that selected NGOs relatively posted more content than selected media houses for creating COVID-19 awareness.

From figure 1, it can be understood that among all the six organizations as well as in the media category, Prothom Alo posted the highest number of visual content and it is about 116. And among the NGOs, UNDP Bangladesh posted the highest number which is about 96. On the other hand, bdnews24.com posted about 8 visuals which is the lowest number of visuals among all organizations as well as in the media category, and in the NGO category Save the Children in Bangladesh posted the lowest which is about 24 visual contents.
In terms of video content from figure 2, Prothom Alo posted about 96 videos which are the highest in number among all. In the NGO category, UNDP Bangladesh posted the highest number of video content which is 53.

Figure 3 states that UNDP BD posted 43 image contents that are the highest among all and in the media category Prothom Alo posted the most and that is about 21 contents.
Out of six organizations, only three posted any talk show content for creating COVID-19 awareness. Prothom Alo posted about 24 talk show contents. UNDP BD and BRAC posted 10 and 7 contents respectively where BBC Bangla, bdnews24.com and Save the Children in Bangladesh didn’t post any.

In figure 5, celebrity presence means any kind of visual content or program where one or more celebrities spread awareness messages. All the organizations posted visual content with celebrity presence except BBC Bangla. Prothom Alo posted 55 content with celebrity presence which is the highest in number.
In this general awareness video category, this research has found that UNDP BD posted the most videos which are 10 in number. In this category, those videos were selected where any random or educated person or without the presence of anybody, awareness message was being delivered.

Here, in figure 7, by infographic video, it means when without the presence of any host or voice, an awareness message was being delivered by showing information with animation, graphs, charts, images, etc. In this category except for bdnews24.com, all the organizations posted content where BBC Bangla and BRAC both posted 9 videos, and that is the highest.
Explainer videos are those kinds of infographic videos where any host or background voice explains any topic or situation with the help of an animation, graphs, charts, images, etc. BBC Bangla posted the highest number of explainer videos which is 15 in number where UNDP BD posted none.

From figure 9, it can be seen that BRAC posted the highest number of interview content which is 9. In the media category, Prothom Alo posted the highest, with about 6 interviews. UNDP Bangladesh and Save the Children in Bangladesh didn’t post any content for COVID-19 awareness.
In the puppet show category, it can be seen that only Save the Children in Bangladesh posted 4 puppet show programs and they are the only organization that used this method for creating COVID-19 awareness.

Facebook live means when any person or host or the admin of a Facebook page delivers a certain message using the live broadcasting feature. And from figure 11 it can be seen that again only Save the Children in Bangladesh used this method two times.
Figure 11

Comparison of Total Facebook Live Contents of Media and NGO Facebook Pages

Figure 12

Comparison of Total Infographic Image Contents of Media and NGO Facebook Pages

Infographic images are those kinds of content where information is being presented with graphs, charts, pictures, etc. It can be seen that BRAC posted the highest 10 infographic image content. In the media category, BBC Bangla posted the highest number of contents which is 7.

On any Facebook page, the cover photo is like a banner attached on the top all the time and any viewer of any page will see it every time. So, by default, the cover photo has a huge viewership. And all the organizations had changed their cover photo at least once. Most importantly, the Cover photo is the only category where all of the six organizations had contributed which is clear in figure 13.
In this comic/cartoon category it can be seen that only BRAC and UNDP Bangladesh had contributed. BRAC posted a total of 21 contents where UNDP Bangladesh posted 9 contents in this category.

A general awareness image is such an image where COVID-19 related messages were delivered in a simplified way. Photographs, sentences, or simple vectors may be used to deliver this kind of message. Figure 15 shows that UNDP Bangladesh and Prothom Alo posted about 32 and 19 contents respectively in this category.
From figure 16, it can be seen that Prothom Alo had a variety of contents and among them, the explainer video got the highest average view. And that’s about 2.9 million. General awareness videos and videos with celebrity presence also got a huge number of views. But of all categories, celebrity presence video content was highest in number and the average view is also very high. That's about 207 K. Prothom Alo was able to reach a huge audience through their celebrity-endorsed videos.

From Figure 17, in terms of BBC Bangla explainer videos got the highest average view too which is around a million views. Their interview and infographic videos also had nearly half a million views.
Here in figure 18, bdnews24.com had the highest view from their interview content which is about 43K. But this amount of average views is relatively lower than Prothom Alo or BBC Bangla.

Figure 19 show that UNDP Bangladesh got the highest view from videos where any celebrity was present which is about 145K views. Their talk shows also had a huge number of average views.
From figure 20, it can be seen that videos containing any celebrity got the highest view in terms of BRAC too which is around 1.4 million. BRAC also got a huge viewer for their explainer video content that is around 890K.

Figure 21 show that Save the Children in Bangladesh also got the highest view in celebrity presence videos which are around 14K. They got around 12K views from their Facebook live videos on COVID-19 awareness.
Figure 21

Average View of Save the Children in Bangladesh Facebook Page Contents on COVID-19 Awareness

![Average View (K) Chart]

Figure 22

Average Reaction of Prothom Alo Facebook Page Contents on COVID-19 Awareness

![Average Reaction (K) Chart]

Explainer videos got around 77K average reactions which are the highest among other types. They received around 8K reactions on their general awareness videos. And on the cover photo, they received around 5K reactions. So in terms of Prothom Alo, video content received relatively more reactions than image content.

Figure 23 show that BBC Bangla received around 25K reactions on their explainer videos and 23K on their interview contents. They had around 3K reactions on their cover photo and infographic images.
Figure 23

Average Reaction of BBC Bangla Facebook Page Contents on COVID-19 Awareness

Figure 24

Average Reaction of Bdnews24.com Facebook Page Contents on COVID-19 Awareness

In figure 24, bdnews24.com received their highest average reaction on interview content which is around 4K.

Figure 25 show that infographic images of UNDP Bangladesh received the highest number of reactions than any other image or video content which is around 9K where the highest reaction of their video category, celebrity presence is around 2.3K. And their Comic/Cartoon received around 1.5K reactions which are higher than their other video contents.
Figure 25

Average Reaction of UNDP BD Facebook Page Contents on COVID-19 Awareness

Figure 26

Average Reaction of BRAC Facebook Page Contents on COVID-19 Awareness

Here in figure 26, BRAC had received around 49K average reactions for their celebrity presence video which is more than double from their explainer videos which got the second-highest reactions of 22K.

Figure 27 shows that Save the Children in Bangladesh got the highest reaction on their videos with celebrity presence which is around 562 reactions.
Figure 27

Average Reaction of Save the Children in Bangladesh Facebook Page Contents on COVID-19 Awareness

![Average Reaction (K)]

Figure 28

Comparison of Average View among the Facebook Pages of Media and NGOs on COVID-19 Awareness Contents

![Comparative Average View (K)]

From this chart, we can understand that among all the organizations and all of their video contents explainer videos, celebrity presence, interview, and infographic videos got the highest number of views respectively.

Figure 29 shows that, among all the organizations and contents explainer videos, celebrity presence, interviews, infographic videos, and infographic images received the highest reactions.
respectively. And it also can be seen that among different types of image content, infographic images received the highest amount of reactions.

**Figure 29**

*Comparison of Average Reaction among the Facebook Pages of Media and NGOs on COVID-19 Awareness Contents*

![Comparative Average Reaction (K)](image_url)

**DISCUSSION AND CONCLUSION**

All the media and NGO organizations have posted videos or images for creating awareness about COVID-19. From the data presentation section, among the six organizations, Prothom Alo had posted more COVID-19 awareness contents (116) than others where bdnews24.com was in the least (07). In the NGO category, UNDP Bangladesh posted more content (96) than others. But in terms of variation of contents Prothom Alo, UNDP Bangladesh and BRAC posted more content than others. UNDP Bangladesh and BRAC posted comics/cartoons that none had done. BBC Bangla gave more emphasis on infographic content than other organizations. Prothom Alo tried to make people more aware than other organizations through celebrities. They also emphasized posting talk show content. Out of the entire contents, explainer videos and celebrity video content received higher views and reactions than others. Videos with the presence of celebrities were posted by all the organizations except BBC Bangla. And the total views and reactions of celebrity presence videos were higher than others in terms of the total number of contents.

However, video content received more reactions than image content. Only the infographic images of UNDP Bangladesh got more reactions than their video contents. And all the organizations gave more emphasis on video content than image.
The whole findings of this research can be easily understood through the lens of the Information/ knowledge deficit model. On 8th March 2020, when the first COVID-19 patient was found in Bangladesh, most of the people were unaware of its infecting procedure or the ways to remain safe from it. And as most of the information was scientific it was hard to understand for general people. So, there was a presence of information deficit at that time of COVID-19. Visual contents tried to eradicate those gaps. This research found that explainer and infographic contents got the top view than other contents. As we know, this kind of content is easily conceivable and for that reason most people preferred it.

Future Suggestions

This research aimed to explain the types and public engagement of COVID-19 visual contents. The psychological reasons behind viewing any visual content more than other contents need to be researched. And which pattern is easier to understand than others is also research worthy.

Limitations

For conducting this research some limitations have been faced. They are given below.

- This research has been conducted on some particular NGO and media’s Facebook pages. An increase in the sample size may further furnish the findings.
- The data collection process was long and has been done scrupulously. Despite that, some data may be missed unintentionally though that not necessarily alters or creates any deviation in the final result.
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