Disinformation and Misinformation Research: Trends in the Past and Ways for the Future

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Abstract

Increasing, yet intensified and charged discourses in communication research literature and beyond about the ways of tackling the menace of misinformation, and disinformation as well, amply indicate how the post truth media content, particularly digital media content, contaminated the global information ecosystem implicating for social and political communication practices and necessitated complicated verification methods and vetting mechanisms. At various points in history, with the outbreak of communal clash, pandemic or war, this menace has been taken seriously by the authorities, both governmental and non governmental, as it could cause harm to the lives of people (Vogel, 2017). Realizing the harmful power of misinformation on the web, and being helpless to fight against the spreading misinformation beyond a limit, the necessity of the time being is to find alternatives to fight the fake through more detection strategies. This work analyses the studies related to disinformation and misinformation across the globe and with special reference to India, trying to find out the recommendations for the field of communication research as what should be the future agenda on the study of misinformation and disinformation. Rather than limiting certain aspects of the cause and impact, further steps need to be taken on the literacy of detection of misinformation, public awareness and inclusion of community-based media literacy initiatives. For example devising newer credibility assessment mechanisms has become need of the hour when it comes to infiltration of misinformation and disinformation trends to serious academic communication domains (Marwick and Rebecca, 2017). Same is the case of other domains too, particularly journalism, which is fundamentally positioned as a process of verification. The article presents suggestions based on previous studies experiences as to how the verification and credibility assessment enterprises shall move forward.

Keywords: Misinformation, Disinformation, Media Literacy, Information Literacy, Media Research, Communication Research.

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Misinformation Research: Tracing the Trends and Carving the Way Forward

Misinformation and disinformation are two terms that have gained popularity in the post-truth era but are very difficult to define and the complexity in their definining arises not only from the confusion in their conceptualization but also at the functional level. Viewed through a functional perspective, disinformation and misinformation and their action patterns are unpredictable depending on time and context. The unpredictable is most often inefinable in their exact terms. Fast changing digital technologies offer newer and newer audience engagement methods, interactive ways, form and content constantly redefining the dynamics of information dissemination and consumption patterns. It again complicates the definition that convey the exact meaning in the present day context where disinformation and misinformation do what was imagined of them or conceptualized about them in communication and information literature of bygone era.

Disinformation and Misinformation are terms that are being widely discussed these days due to the influx of information on the web. Though both these terms evolved long back and had a lot of impact on notable incidents, the consequences were further strengthened due to the advent of the Internet. Disinformation can be defined as deliberately misleading or biased information, manipulated narrative or facts, or propaganda. Misinformation is the false information that is spread regardless of whether there is an intent to mislead. Disinformation and Misinformation have been a topic of discussion across the globe since years back. Today, it has become more evident with the weaponization of information by governments and public relation agencies. A deliberate attempt often happens at the beginning and the content is being shared at the other end often as misinformation. Numerous studies have been conducted on disinformation and misinformation at various aspects, in the field of communication. Most of them are limited to certain aspects of misinformation and disinformation, such as the historical context, political influence, 'infodemic' in the health sector, consequences of misinformation and media literacy, digital divide and information literacy etc. The studies on detection of fake content online is relatively a new topic, which is being studied in different parts of the world these days. Since the detection tools for misinformation are being developed day by day, a continuous effort is required in order to keep track of the trends in the developments of the field. In the context of India, various efforts are being taken by government, independent bodies as well as corporates in order to develop strategies in combating misinformation. Studies on various models of detection literacy would probably be needed in the near future.

The history of disinformation and misinformation can be traced back to the 12th century, as a child went missing in Italy and rumours spread as the child had been kidnapped and killed by the Jewish community and celebrated Christmas Eve by

drinking the blood of the child. It further developed into communal violence and couldn't even be controlled by the communal leaders. The rumour was spread in depth to the minds of people as they blindly believed the misinformation, which couldn't be recalled even after the child's body was found, and there are still people who believe the fake information as truth. During the 17th century, historians began to play a role in verifying the news by publishing their sources as verifiable footnotes. The trial over Galileo's findings in 1610 also created a desire for scientifically verifiable news and helped create influential scholarly news sources. The influx of fake news increased as per the increase of printed newspapers. There were claims that sinners are responsible for natural disasters which were believed by thousands of people on religious background. Religious texts and certain beliefs catalysed the spread of rumours which influenced many people through the channel of faith. (Soll, 2016)

Since science and technology have advanced a lot by today, misinformation related to the field of science and technology could be simply verified, but the historical misinformation is still found difficult to verify. Analysing the global trend on the studies on misinformation, it could be found that most of the studies at the primary level focus on the psycho-social aspects of misinformation. Studies conducted in the western countries during the last ten years have concentrated on the various aspects of misinformation including science, health, religion, politics, socio-cultural and communication aspects.

The inquiry to define disinformation and misinformation has started a long way back, and a lot of studies have been done in the last ten years across the globe to trace out the history and evolution of misinformation. A set of such studies would conclude that the history of misinformation and disinformation is not just limited to certain contexts, but there were propagandas and satires in various political contexts also, which catalysed the spread of misinformation. Analysing various articles on the history and evolution of misinformation at international level, it is found that most of them are somehow related to the political wars and other conflicts.

During the First World War, patriotism and nationalism were wrongly projected through misinformation in Britain, in order to recruit people to the army. Propaganda played a crucial part in the process as the population was convinced that their sacrifices for the country would be rewarded. Certain slogans and advertisements used in this regard were of strong propaganda or tactics. (Welch, D, 2014)

The process of propaganda played a crucial role in misleading the public as well as communities in various wars in the world. It continued in the Second World War, Vietnam war, the cold war, Iraq war and Syrian civil war. The various aspects of

different studies on the misinformation and propaganda during the wartime indicate the consequences of misinformation and propaganda that spread during the wartime.

Misinformation has deep connections with political discourse, in connection with deception and propaganda. It has started with exaggerated content of falsehoods presented in public speeches, or mentioned in the written works. Propagandists also used cartoons as an effective medium for satirical content from the 18th century. The propaganda based content could often influence people to a large extent during a number of civil wars across the world. With the invention of printing, the magnitude of circulated propaganda based content has increased a lot, by using printed material to spread falsehoods and misinformation as part of political aims. Invention of photography and colour printing added to this. Later with the invention of radio and audio visual media, songs and movies became important tools of spreading fake information as part of propaganda. As the new media and internet further increased the magnitude of the space for the distribution of content to a vast majority through personalised platforms, spread of fake information has been further increased. (Sample, Justice and Darraj, 2019)

Numerous studies have taken place on how misinformation and disinformation have been used for political propaganda and even to influence the elections. According to Quarts, People shared nearly as much fake news as real news on Twitter during the US presidential election in 2016. Most of the content that were later identified as fake, were circulated on the days immediately before and after the elections.

The trend of fake news was at its top prior to the presidential elections in America from 2016. Around 140 fake news websites were identified which were spread over social media. Craig Silverman, editor of Buzzfeed had investigated on the topic during the time and found that the misinformation was widely spread in the form of advertisements through social media. It was identified as part of the political propaganda that misinformation was deliberately spread. Donald Trump was identified as the first politician to use the term fake news. According to Clare Wardle, social media like twitter were used previously for verifying content as the space was effectively used to debunk misinformation, but now it is not an easy task since an overflow of fake news and misinformation is spread over social media. Concrete actions are being taken by governments and organizations to make people aware as well as to develop tools to combat fake news. (Wendling, 2018)

Apart from the war propaganda and political aims, there was misinformation spread across the globe on scientific, religious and socio-cultural issues. The misinformation on science can be traced back to the belief in the myths,

There was false information spread across the world related to the field of science as well, since it was something far for common people and was easy to create misinterpretations and make them believe. Proving scientifically false information was also not an easy task during the time since the advancements of technology was not on its height. One such major misinformation spread was from the US, in the New York Times. The *New York Sun*'s "Great Moon Hoax" of 1835 claimed that there was an alien civilization on the moon, and established the *Sun* as a leading, profitable newspaper. (Soll, 2016)

The misinformation on science is still a nightmare. It mostly happened in the world related to health communication related to various epidemics, precautionary warnings, and other forms of health related awareness messages. Rumours and misinformation spread on contraceptives and family planning in Africa was one among many other countries. According to a study conducted in 2011, the major sect of the society who were away from being trusted in scientific communication were the women from rural areas. The situation still remains in countries including India, mainly because of digital divide and information illiteracy. Myths and misinformation equally cause misinterpretation of facts.

Misinformation based on myths is often connected to religion also. There is a huge amount of misinformation developed by Islamophobia. The community is being labelled often with terrorism and other inhuman activities. The religious teachings are often considered as misinformation by certain sects of people in order to develop anti-religious elements. There are studies that prove religion never becomes a reason for misinformation. A study on the Information literacy in Islam states that there are enough recommendations in Islam itself to be aware of misinformation and be away from spreading unconfirmed information.

The Islamic teachings on seeking beneficial knowledge for life, verifying truth, and intellectual humility always contribute to the information literacy of the community. By acquiring and teaching these skills within a particular community, the community can protect themselves, their families, and their communities from anti-religious disinformation, scam artists, fake news, conspiracy theories, and other such sources of deceit. (Parrot. J, 2018)

A minority who don't believe science and medicines often misinform people regarding the scientific measures. It was witnessed during the spread of Ebola in 2014 and continues to be the same during the COVID-19 pandemic by the end of 2019. Various studies have been conducted recently on the misinformation spread related to COVID-19 disease, precautions, treatments and vaccination. Safety and effectiveness, alternative medicine, civil liberties, conspiracy theories, and morality were the base of most of the misinformation circulated on the web. The

pandemic time also witnessed political propaganda being reflected as misinformation connecting the virus spread among different countries.

According to several studies, most of the information spread on the web regarding coronavirus across the world was not credible enough. The amount of verified and authentic information on the issue was far less than the misinformation and unauthentic information spread on the web during the pandemic time. This has highly affected the population behind the line of digital literacy. Since research is still going on about detecting false information on the web, and ever since it is not an easy task for the common people, the misinformation on COVID-19 has been a major threat for the field of health communication.

According to an infodemiology study conducted by JMIR Public Health Surveillance, Health professionals and the scientific community need to be more aware of the quality of information they read and produce on the web. In the scenario of widespread misinformation on the web, there is a high risk to public health on usage of the internet. The governments at national and international level must be developing strategies in order to regulate health information on the web from unauthentic sources.

Specific misinformation claims are consistently deemed reliable by a substantial segment of the public and pose a potential risk to the public health. There are issues related to vaccine hesitancy which also contribute to sharing misinformation. There is an important and crucial role for the scientists and media to play as disseminators of factual information and health guidance for the public. (Roozenbeek. J, et. al, 2020)

Analysing the misinformation studies with special reference to India, most of the research on Information literacy, disinformation and misinformation are limited to certain topics including digital literacy, digital divide, internet accessibility etc. The Press Council of India in 2018 has come up with a definition of fake news in terms of the nation's well-being. According to PCI, *information, an intentional twisting of a news story etc.* It has been analysed by the legal experts that the definition of Press Council was limited to defamation and was only mentioned in elections which ignores the social and cultural issues and religious polarization that a fake content would create.

Journalism in India has been on its way to be outstanding and committed towards the truth. But the pressure from the political institutions, part of the media house or from outside has been putting pressure on media houses and journalists in India, for mere political and profit interests. There are revenue concerns also since the central and state government advertisements are the major revenue of every media house and

standing in favour of them would only invite more ads and otherwise would get selectively withdrawn. These concerns affect the trustworthiness of the Indian media and meanwhile affect the fight against misinformation which are two highly interrelated concepts. (Upmanyu, 2018)

According to several studies and news reports, social media campaigning is the key tool of every political party in India today as it is identified that social media content can influence people a lot. Another insight towards the same is that the digital illiteracy of the majority population in India would help in not recognizing false information being circulated in the new media space. This is being widely misused and fake information is being circulated anonymously over different social media platforms.

Political parties in India spend a high amount of money for digital campaigning, especially on social media. Election Commission of India has recently instructed the political parties regarding the campaign on the social media where they have to produce the expenditure details for the same along with other modes of publicity. There are numerous politicians in India who have created a modest image of themselves on social media. The social media strategy of the political parties ensures a specific number of followers on social media which creates a concept of virtual acceptance of the personality among social media users and which would definitely reflect in the public space as well. (Banerjee & Haque 2018)

On the other hand, social media as a political weapon also leads to intolerance and religious disharmony in India. The recent mob lynching in India has a big story of fake information and forwarded content behind. The society is being polarized politically with the influence of the fake information forwarded aiming at political interests of certain groups. The polarization is caused mostly by the illiteracy of the public in order to understand the truth.

The disinformation is to be seen as a more complicated issue in India compared to the west in the context of the political polarization. The existing economic inequality, poverty and low trust in the administration will eventually make this a serious concern. The media being biased for political and profit reasons would become a major challenge in fighting against misinformation in the country, as the trust of the public in the mainstream media matters a lot. Journalists and media houses have to ensure their acceptance among the public, especially in the rural areas and provide verified content in order to fight against misinformation and disinformation. (Upmanyu, 2018)

The advent of the internet and social media has further increased the influx of fake news and misinformation today. Since social media is a space where anyone can share

information to the public, and can even be anonymous. Applications like WhatsApp have now become the space where a lot of unverified information is being shared blindly, without source and without attribution.

In India, WhatsApp has been one of the major platforms that is used to spread fake content. The reasons behind WhatsApp being so is the digital illiteracy of the public. WhatsApp has a very basic UID which is accessible to anyone owning a smartphone, it has become a hub of misinformation. Since WhatsApp has recently increased the number of members in a WhatsApp group to 256, many public groups have been formed and the community using WhatsApp got quite wider. This also contributed to a wider circulation of unconfirmed content. Difficulty in tracing out the origin of the message, difficulty in stopping the already forwarded content etc. are an important flaw of the medium which causes an influx of fake content.

WhatsApp and Facebook are the two major platforms in India which often become the hub for the flow of fake information. WhatsApp being a more personalized instant messaging application mostly preferred to connect with family and friends, and Facebook found wider than the previous, both platforms are witnessing an influx of misinformation which are mostly unidentified. People who deliberately share wrong information would eventually become misinformation as people unknowingly share them without verification. (Banerjee & Haque, 2018)

In India, the accuracy of news media content is found to be 82 per cent (Fielden, Grupac and Adamko, 2018, p. 55). This indicates the traditional media which are believed to be authentic and trustworthy has a minimal amount of wrong information being passed on. The chances of a huge percent of misinformation on social media and internet are high, where such a study is yet to be conducted.

Since the users of social media especially in India are not highly literate digitally, and the aim of fake information on the web is either political propaganda by satirical content or for the personal revenue, a general awareness and introduction of verification tools would help users distinguish fact and fake. Data validation tools are to be developed further with more efficiency, as the pattern and style of fake content online is changing instantly, where it becomes a difficult task to develop validation tools.

Since social media has become the space for people to talk about anything to the public, the line between journalists and the public has been blurred. This actually increases the responsibility of journalists. There are various concerns over the trustworthiness of the content that journalists receive, as well as the ways to prove themselves as trustworthy is another challenge. (Upmanyu, 2018)

Most of the recent studies conducted in India on misinformation are on the COVID-19 pandemic. Since the outbreak of pandemic in India from the beginning of 2020, there has been an influx of misinformation on the web related to the virus spread, precautions and treatment. Unfortunately, the misinformation was even shared by prominent figures and the educated community. Most of the studies stress on the need of making the public literate on the consequences of misinformation, and to educate them on the tools by which they can detect fake content online.

There are numerous media houses and non-profitable organizations that work on fact-checking and to aware the public regarding the ground truth of the story. Alt News and Boom Live are the two major media houses continuously engaged in fact-checking in India. The contribution of both these media houses recently have been helped the public access accurate information on the web.

Several initiatives have also been taken by FactShala, an Information Literacy Network initiated by DataLeads and Internews, with the support from Google News Initiatives in India. The network consisting of around 250 trainers have conducted various training sessions on addressing misinformation and fact-checking at various levels in the different parts of the country. Analysing the report of the feedback and study conducted thereafter, it is found that the majority of rural population are still far behind in understanding whether an information is right or wrong. Several steps have been taken by the initiative to give awareness on the ongoing 'infodemic' about the corona virus in the country. It has also conducted a series of webinars for the public on vaccination myths and misinformation.

Analysing the previous studies, most of them specify the inevitable contribution of the media in fighting disinformation and misinformation. Most of the studies across the globe have recommended further studies in the field specific to fact-checking, information literacy and detection of misinformation. The future agenda for the research in communication with special reference to disinformation and misinformation can be focused on the public awareness and effectiveness of the existing fact-checking systems, the need of introducing new ventures on verifying the information on the web, the misinformation detection mechanism for common people etc. Since there is a major population in the country depending on the traditional media, the role of such media in providing awareness on the influx of fake content on various issues and topics, and also educating the public on the impact of misinformation is also recommended.

Media literacy is the basic idea by which combating misinformation would succeed. Studies to explore the possibilities of media literacy education programmes at grassroots level of communities and rural population in the country with the support of various organizations which are already working for the same goal would help

survive the 'infodemic'. Quality research being dynamic on the constantly changing scenario misinformation and technology would help fight against misinformation.

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