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Community Medicine

PSYCHOLOGICAL IMPACT OF SATURATION COVERAGE CAUSED BY MEDIA DURING THE COVID-19 PANDEMIC AMONGST THE GENERAL PUBLIC IN INDIA

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Introduction: As India battles a renewed wave of the Covid pandemic driven by newer strains of the virus, answers were sought for the paradox of the course taken by this disease in a nation of 1.4 billion that has so far reported among the lowest rate of mortality per million population while the media-driven perceptions in a country with long democratic traditions sound an alarming picture. This study was initiated to find out the perceptions of a segment of the Indian general population as they find themselves exposed to high voltage carpet coverage of pandemic related news powered in so small measure by the internet-data powered smart phone era in contrast to the earlier pandemic two decades ago and the one witnessed nearly a century ago. This study reveals that social media does exaggerate reality by the sheer avalanche of information and the study subjects seem to agree for the need to bring about some degree of control mechanism in the best interests of all stakeholders. Methodology: Data was collected from 731 participants from all states of India by means of a questionnaire made using Google Forms. Results: On analysis of our data, we found that media coverage regarding the COVID-19 pandemic, due to the widespread misinformation, has contributed to the spread of panic, anxiety, and hysteria. With this fear being psychological (39.9%) in a significant number of people, more so in the older age groups. One of the most crucial findings in our study was that a majority of the study population (65.9%) agreed that there should be filters set up on what is being posted on social media about news related to COVID-19. Conclusion: Despite mass media's great benefit in amassing relevant data, it sometimes serves as a source for the generation, manipulation, and distribution of misinformation leading to widespread panic and stress among the public.

KEYWORDS: COVID-19, mental health, stress, media, misinformation

1. INTRODUCTION:

Every so often, a novel strain of an organism emerges on account of a mutation in an existing organism's DNA or proteins, which may change its proclivity of infection. This "hot off the press" organism is referred to as a NOVEL strain, derived from the Latin term Novus meaning new, as seen in the COVID 19, Spanish Flu, MERS-CoV and Zika pandemics.

COVID-19 is a communicable disease caused by SARS-CoV-2 presenting with typical symptoms such as cough, fever, fatigue, shortness of breath. "Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment (1)".

The disease symptoms are aggravated in the older age group, people with underlying medical problems such as cardiovascular disease, chronic kidney disease, diabetes, chronic respiratory disease, hypertension, and cancer. On 11th March 2020, the World Health Organization (WHO) announced the COVID-19 outbreak as a pandemic.

The presence of a means for worldwide communication system for propagating data is something that did not exist previously. Although a blessing in most cases, the issue with such an extensive network is the lack of a verification system for scientific data, leading to misinformation propagation. The COVID-19 infodemic is nothing short of a global predicament as determined by the WHO.

Social media remains an excellent platform to stay informed of the vast amount of medical knowledge regarding the corona virus. It also helps to share various perspectives regarding life-threatening and health-related issues. "Social media platforms, including Twitter and Facebook, have allowed the rapid exchange of information — and sometimes misinformation (2)". The lack of credibility and precision of social media could be a massive drawback regarding health information.

The wide use of media has made people susceptible to misinformation, false news and various rumors often resulting in a domino effect. This phenomenon of spreading viral misinformation is named as "misinfodemic". Addressing these erroneous assumptions is extremely important to prevent widespread panic, fear, and anxiety and thus, the individuals' mental and physical health. With the spread of the misinfodemic, the inability to obtain adequate psychological support and direct medical information regarding the outbreak might be reasons for the higher prevalence of anxiety among the non-medical health care workers (3).

The use of visual data has been on the rise, and it has become handy in the demonstration of the distribution, transmission, and trend of the Coronavirus news. The unprecedented pandemic has brought an enormous amount of real time data, and many online media platforms adopted visual graphs to release COVID-19 statistics, which were rarely used during the severe acute respiratory syndrome (SARS) outbreak (4).

This study attempts to study the impact of social media on a randomly selected cohort of the Indian general population.

2. MATERIALS AND METHODS:

A cross-sectional study was conducted from January 2021 to March 2021 with the aim of assessing the impact and role of media during the COVID-19 pandemic in India.

Inclusion criteria:

Individuals aged 18 or above and living in India

Exclusion criteria:

Individuals without access to electronic devices

METHOD:

The questionnaire was sent as a Google Form via WhatsApp and

Instagram to the contacts who were drawn from the general population. The respondents were in turn also requested to share the questionnaire amongst their contacts as well. Necessary permission was obtained from the institution's ethics committee for conducting this study.

Material:

The validated questionnaire consists of 5 domains:

- Consent
- Demographic data
- MGeneral usage of media by the public
- · Psychological and social
- · Physical and environmental

Study design: Cross-sectional study

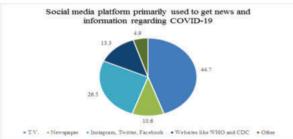
Sample size: 731 participants

Study tool: Google Forms Questionnaire

3. OBSERVATION AND RESULTS:

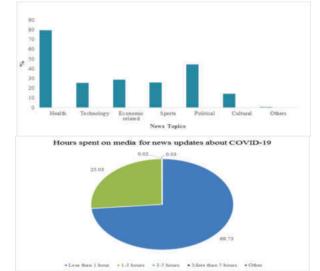
Out of the 731 participants 62.24% were in the age group 18 - 25 years, 3.55% were in the age group 26 - 30 years of age and 9.84% were in the age group of 30 - 40 years of age.

Out of the 731 participants 45.5% (331) were male and 53.8% (391) were female, 0.1 (1) chose other and 0.6% (4) preferred not to reveal their gender.



From the responses it was noted that Television was the most widely relied on source of news with 44.7% participants relying on it as their primary source of information.

Which news topic have you primarily heard/seen/read on social media during the recent months in $2020?\,$



69.73% of the individuals spent less than one hour, 25.03% spent between 1-3 hours, 0.03% spent between 3-5 hours and 0.02 spent more than 5 hours on social media platforms for COVID-19 updates.Majority (47.3%) of the individuals agree that publishing more news related to COVID-19 on social media has spread fear and panic among people. Whereas 28.9% disagree and 23.8% are not sure about this statement.

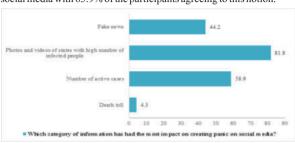
Regarding the level of coverage by news channels, 42.9% of the

individuals agree that it was good enough, whereas 30.3% disagreed and 26.8% were not sure.

Opinion on filters being needed to be set up for social media and specific policies during Covid-19

Yes	65.9%
No	18.3%
Not sure	15.8%

Majority of the participants agreed that filters needed to be set up for social media with 65.9% of the participants agreeing to this notion.



Majority of the participants (81.8%) think that photos and videos of states with high numbers of infected people has had the most impact on creating panic on social media, 58.9% of the respondents think that the number of active cases had the most impact and 44.2% of the respondents think that fake news had the most impact on creating panic on social media.

Q. How often have you been feeling nervous and anxious after watching news on Covid-19?

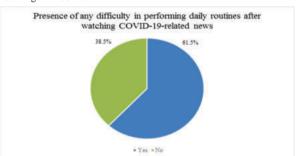
Rarely	23.7%
Sometimes	51.2%
Very often	12.0%
All the time	3.3%
Not at all	9.9%

Out of 727 participants, 372 (51.2%) responded that they felt nervous and anxious sometimes, 172 (23.7%) mentioned they rarely felt nervous and anxious, 87 (12%) mentioned they felt nervous and anxious very often and 24 (3.3%) mentioned they felt nervous and anxious all the time.

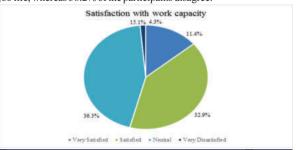
Q. Have your earnings been affected by the Covid-19 pandemic?

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Yes			53.2%	
No			46.8%	

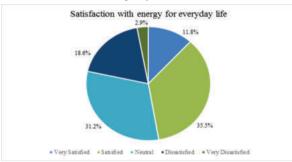
Out of 727 participants, the 387 (53.2%) agreed that their earnings have been affected due to the pandemic whereas 340 (46.8%) reported no change in income.



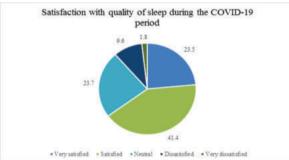
61.5% of the participants agree that it does affect their daily routine and job life, whereas 38.2% of the participants disagree.



Out of the 727 participants, 264 (36.3%) remained neutral about their work capacity, 239 (32.9%) were satisfied with their work capacity, 110 (15.1%) was dissatisfied with their work capacity, 83 (11.4%) were very satisfied with their work capacity and 31 (4.3%) were very dissatisfied with their work capacity.



Out of the 727 participants, 258 (35.5%) was satisfied with their energy for everyday life, 227 (31.2%) remained neutral with their energy for everyday life, 135 (18.6%) was dissatisfied with their energy for everyday life, 86 (11.8%) were very satisfied with their energy for everyday life and 21 (2.9%) were very dissatisfied with their energy for everyday life.



1.8% of the participants were very dissatisfied, 9.6% of the participants were dissatisfied, 23.7% of the participants were neutral, 41.4% of the participants were satisfied and 23.5% of the participants were very satisfied with their sleep quality.

4. DISCUSSION:

Mass media tends to be very compelling, often addictive, and an everchanging kaleidoscope. It presents a constructed "reality", often giving an unintended spin driven by its own perceptions and compulsions, a picture of what exists, what is important, how things are related and what indeed is right. The present study was conducted to assess the extent to which media impacted the quality of life in a sample of the Indian population.

"A significant amount of potentially dangerous misinformation has been generated about the COVID-19 pandemic, and much of it has been disseminated via social networks. This misleading news consists of different facets of the epidemic, which is capable of threatening public safety, which again aggravates crisis management." (5)

"Various studies also outlined that unjustifiable rumors or staggering media coverage has the proficiency to construct misapprehension, misinformation concerning threat approximate in the minds of the extensive public with regards to the likelihood in a public health crisis"(6) Another challenge is to avoid stigma. In the early months of the outbreak, the virus was designated by many media-outlets as the "Wuhan virus". It even trended on Twitter, paving the way for stigmatization and xenophobia." Concerns about a possible association between ethnicity and outcome were raised after the first 10 doctors in the UK to die from covid-19 were identified as being from ethnic minorities (7). "These concerns were then confirmed by data from the Intensive Care National Audit and Research Centre, indicating that a third of the covid-19 patients being admitted to critical care units are from an ethnic minority background (8)". Stigmatization pushes people to cover their illnesses and avoid seeking healthcare to circumvent discrimination. This attitude unfortunately aids the viral spread making it extremely difficult for initiating disease outbreak control measures. Therefore, this implies a clear need for checking the credibility of the news source to avoid unnecessary emotional turmoil caused by misleading information.

"People's willingness to vaccination will also be affected by what is said about the COVID-19 vaccine. Scientists and government health officials will have to take measures to provide evidence-based information that is convincing and persuasive.(9)"

Although the world has faced a fair share of pandemics over the century, one of the worst in living memory of at least the senior generation was undoubtedly the 1918 Spanish Flu, affecting around 50 million people worldwide. Interestingly, the advice given to control the pandemic's spread remains true even a century later, in the current battle against coronavirus (10), such as wearing masks, keeping away from sick people and regular washing of hands.

The containment strategies adopted, invariably tend to create a feeling of discomfort. However, history teaches that the policies and measures implemented during pandemics often perceived as exaggerated by the public, later on would be considered to be grossly insufficient. We as a society have to be motivated enough to collectively hold on to the lifeboat of these preventive measures till the COVID-19 storm settles down and the rainbow adorns the future (11)

The spread of a virus-like SARS COV2, would likely have been more remarkable and virulent, especially in a country like India due to its greater population density. Educating and communicating the right information by public officials becomes an important task and an active media turns out to be an asset to fulfill this task. Communication by public officials needs to be constant and transparent.(12)

Misinformation is very prevalent, especially during these times and, like in the past, it tends to evoke anxiety and hysteria among the people. Promotion of miracle drugs, rumors and hateful comments further worsen the misinfodemic. "Social media must be used to reinforce and strengthen the public health response (13).

Television remains the primary source for gathering information about the COVID-19 pandemic. This had been the case during the pandemics that had occurred during the last decade such as the MERS, H1N1 etc. (14)

The study results reveal that people agree that media coverage regarding the pandemic has contributed even more to the spread of panic, anxiety, and hysteria, with this fear being psychological in a significant number of people, more so in the older age groups. Unlike in the past, of late, all television broadcasts are available in the convenience of one's palm through smart phones.

The results from our data show that almost half of the respondents were indeed affected in some way or the other. Various factors come into play for causing this sense of dilemma among them. The main reason for this, according to the responders, was the dissemination of fake news in various social media platforms. The second reason given by the respondents was the death toll data that was being updated and frequently displayed across all channels. In a study conducted by Kleiman et al, "participants reported greater anxiety about COVID-19 on days when the number of new cases announced in the state were higher and when they consumed more upsetting news specific to COVID-19 (15)".

One of the most crucial findings in our study was that a majority of the study population agreed that there should be filters set up on what is being posted on social media about news related to COVID-19. It shows that people desire censorship on news that is being displayed and spread everywhere. It is to be noted that the Ministry of Information and Broadcasting, which regulates and censors print newspapers, television, films and theatre, in its recent guidelines has mentioned about its jurisdiction extending to digital news and entertainment platforms in India as well. "The Guardian" described this as a bold move from the government extending its reach to regulate the digital realm, seen as more transgressive and offering space for more critical journalism and entertainment than traditional media (16).

Such censorship of data is not a new phenomenon in social media such as Twitter and Facebook, but efforts are being taken to prevent spread of such false data. Similar efforts have been observed internationally, as countries like Australia, China, etc. are trying to regulate data flow owing to the fact that there is an increase in reports of false news.

As predicted, the most sought out topic was health news (79.6%) followed by political news among the respondents (44.6%). This is

fairly obvious as the pandemic has had a huge influence on the way people live and manage their daily routines.

However, it has been observed that the majority of our study population did not spend more than an hour on obtaining news from whatever type of media they used. It seems as if the more the people follow COVID-19 news, the more anxious they become, with the anxiety level being higher among people with someone infected by COVID-19(17).

Regarding the economic aspect of the individuals, it is observed that 53.2% agree that their earnings have been affected since the beginning of the pandemic, with the consequences being more prevalent among the middle-aged groups. Even though most of our participants were students (non-earning), the responses reveal that the entire family has been affected and not just individuals. According to the Ministry of Statistics, India's economic growth had declined significantly in the fourth quarter of 2020.

Unlike the psychological domain, most of the respondents were satisfied with their physical and environmental aspects, including their work capacity and quality of sleep, which they had mentioned as being "satisfying". These positive effects may have helped the population cope with the other negative impacts on the psychological domain.

CONCLUSION

From our research we observed that mass media was not only a source of information for the general public to rely on but also became a source of unnecessary fear amongst the general public, especially during a time when news updates are readily available at all times.

Combined with the fact that this is a highly communicable disease and the daily rise in the number of cases, COVID-19 related news turned out to be the most sought-after section, followed political and economic news. Moreover, misleading items with catchy headlines acted as click-bait for readers and viewers, exaggerating the sentiments of concern.

All in all, media coverage regarding the COVID-19 pandemic has contributed to the spread of panic, anxiety and hysteria. With this fear being psychological in a significant number of people, more so in the older age groups.

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Conflicts of interest:

The authors report no conflict of interest.

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