

A STUDY ON INFORMATION DISSEMINATION OF COVID-19 THROUGH MASS MEDIA FOR PEOPLE WITH DISABILITY

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ABSTRACT

In order to prevent the spread of viruses, it is important to increase understanding of covid-19 among the general population in the world. Government in the world, WHO, NGOs, health professionals, etc. have generated ample knowledge among the public through the dissemination of information on various media, such as television, social media, print and public addressing systems (PAS), etc. Since then, the Government of the world has imposed numerous prohibitions, such as travel bans, wearing masks, lock downs, timing limits, etc., in order to prevent the spread of covid-19 disease. As we know, people with disabilities have already had an access limitation and, due to the lockdown, have been completely restricted to remain indoors and have only relayed information on mass media. This research article aims to investigate the knowledge of covid-19 virus spread among persons with disabilities in Tamil Nadu, India. The study was done among locomotive disabled persons (LD) and hearing impaired (HI) persons and how mass media played the role in dissemination of information on Covid-19.

Keywords: Mass Media, Disability, Social Media, Covid-19, Mass Communication.

Introduction

COVID-19 is a global infectious disease that is believed to have emerged from Wuhan in China's Hubei Province in December 2019. At present around 237 countries have been affected by the novel CORONA virus and total number of affected persons in the globe is 6,43,50,470 and confirmed death of 14,94,668 (As per the WHO dates sheet 05.12.2020). The outbreak has been classified as a pandemic due to the sharp rise in infection among the community.

On the pandemic situation, effective communication strategies have to be endorsed to contain the spread of covid-19 spread. In the present scenario, mass communication plays a key role on dissemination of information on covid-19 spread in order to avert the infection among the public.

The spread of the COVID-19 around the world has proved that it is fatal and deadly and large number of people affected and sizable amount of people have lost their life. This became a tough time for the central as well as state governments as they need to contain the spread of viruses to tackle this health crisis.

The current pandemic of COVID-19 has enforced governments to impose a lockdown, hygienic norms such as wearing mask, hand hygiene procedures, quarantines and social distancing norms, Etc. Those who have affected and non affected by the covid-19 viruses have thought themselves to condense their social relations considerably, especially the persons with disability.

The media coverage regarding Covid-19 during the lockdowns caused anxiety as well as made the public aware of Covid-19. The mass media played a crucial role in building knowledge on covid-19 to deter the transmission of disease. Among the public, the media played a major role in the control of coronavirus disease and updates via live dashboard updates. The media becoming a watchdog on the covid-19, allowing a swift and widespread public health crisis control.

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To examine the mass media awareness among the persons with disability, the questionnaire distributed through Google form to around 125 differently abled persons for their responses. Around 108 persons with disability (LD & HI) were responded to the questionnaires. The statistical analysis was done with the data obtained from the above said group.

Mass Communication

Mass communication can be described as the method of generating and transmitting audio visuals, text messages through different mediums such as TV, Film, Social Media, Radio and Print Media to a wide population is called mass communication. This kind of communication referred to as a one-way communication, there is no immediate feedback available in the process of mass communication, but it reaches a very large audience across the globe.

The mass communication is the multi-disciplinary in nature, it could communicate various themes of communication such as health communication, political communication, entertainment communication, devotional communication, current affair communication and social community communication, etc., Due to the advent of technology and easy availability of internet, the social medium became more popular among the population in the globe for disseminating thoughts, ideas, news and information, etc.,

Information Dissemination on Covid-19

While all members of community are endangered by the COVID-19 pandemic, people with disabilities are particularly impaired by the attitudinal, environmental and social obstacles that are repeated throughout the COVID-19 response. With input from WHO (World Health Organization) and ICMR (Indian Council for Medical Research) on spread of covid-19 virus, the Union and state governments are taking necessary action to curb the outbreak of COVID-19. One of the steps is the dissemination of information to the general public through a range of channels such as television awareness films (TV), social media campaigns, mobile phone caller notes, radio jingles, web portals, posters, illustrations, arts, animated videos and public voice messages.



Fig-1

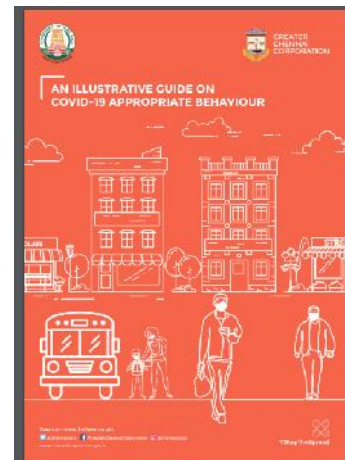


Fig-2

For example, Figures 1 and 2 explain that one of the methods of dissemination of information adopted by the Government of Tamil Nadu in order to make the public aware of the spread of covid-19. Figure-1 gives details on prevention steps for diabetic patients and Figure-2 reveals that the Greater Chennai Corporation 'An illustrative guide on appropriate behavior for Covid-19.' With help of these information dissemination Government in the globe utilize the various form of information propagation to contain the covid-19 disease.

Barriers for Persons with Disabilities on Covid-19 related Information

During the Covid-19 pandemic, certain communities, such as people with disabilities, became substantially more affected by access to information on COVID-19. This effect can be mitigated if simple steps and preventive measures are taken by Government authorities, NGOs, health care providers, etc., by providing sufficient information on covid-19 for their protection.

Many persons with disabilities have pre-existing health problems that make them more vulnerable to primary infection, with more serious effects following infection, contributing to higher levels of deaths. Lockdown policies have made it impossible for people with disabilities, who are dependent on their daily earnings and living, to survive. People with disabilities still continue to face discrimination and other obstacles to access to livelihoods and income security, to engage in online schooling and to gain care and protection.

Particular categories of people with disabilities, such as those who are unemployed and lack appropriate accommodation face much greater hazard. Those who have knowledge of these challenges contribute to better responses that help alleviate the adverse effect caused by covid-19.

With the advancement of mass communication technologies and the widespread use of smart terminals, social media has become an effective source of knowledge for many individuals and, in particular, for people with disabilities. As disabled people have accessibility limits, the key source of the tool will be social media such as Facebook, Instagram, WhatsApp and Twitter, etc. With the aid of social networking platforms, people with disabilities, receive input from these social media for their awareness and information. For the person with a disability, the social media has been the most effective platform for disseminating information on covid-19.

Materials and Methods

An online (Google form) survey was conducted to collect responses from 125 different persons from different districts of Tamil Nadu. The survey questionnaire was prepared in both English and Tamil, the official and native language of Tamil Nadu. Only the person with locomotive disorder (LD) and hearing impaired (HI) were picked for the survey.

The contact details of the sample group were gathered with the assistance of the WhatsApp group established by the NFDC (National Film Development Corporation) to provide short-term training in media skills development.

Review of Literature

Mejia and et al on their article **The Media and their Informative Role in the Face of the Coronavirus Disease 2019 (COVID19): Validation of Fear Perception and Magnitude of the Issue** described how the dissemination of information by health professionals, friends and family reduces the anxiety and fear of covid-19. This article measures the exaggeration of media in reporting the information and it is revealed as fact that media it possible to identify whether the population or the media is disseminating inappropriate information. It may happen that the media overestimate the magnitude of the issue or that the spectators/listeners underestimate the importance of the news. In both ways it is important to see what is happening, especially with regard to the mass media in urban and rural areas. Also the authors described that social networks are another important media that have been very well received by young people, which could also have influence on the exaggeration or distortion in series of news and their unreliability. Through this journal, the authors suggested that, new studies should evaluate these questions in accordance with the most used means of communication or the one with the greatest distortions in the information provided with respect to a given topic, such as COVID-19. The study concluded that in the validation of their scale that measures the perception of the media and their informative role concerning the COVID-19 pandemic were found three factors: exaggeration of the media, generated fear and information received from health personnel, family, and friends, which could all have some influence according to how they inform people about the COVID-19 pandemic.

In the article on **Ethical and Critical Dissemination of Knowledge during the COVID-19 pandemic**, Farid Rahimi & Amin Talebi Bezm Abadi (2020) expressed their concern about publishing information during the covid-19 pandemic with many publishers and prestigious scientific reports, related to covid-19 journals. They also stated in their article that, peer-review requests in relation to COVID-19 publication submissions to these publishers have been flooded with qualified virologists, epidemiologists, and clinical experts. During this crucial pandemic, the authors highlight some possible issues related to international scientific publishing and general dissemination of information. Also, the authors have mentioned in their journals that COVID-19-related manuscripts were sent to preprint servers such as medRxiv, many of which were unexamined (Verity et al. 2020; Wilson et al. 2020). While pre-print repositories disseminate information instantly, making it immediately accessible, while referencing these resources, users of un reviewed scientific publications must be cautious. During the pandemic, the authors felt that the scientific rigor of peer review could not be undermined because the knowledge volume is immense and the peer reviewers and journal editors are flooded appropriately.

Alexander Chern MD and Samuel H. Selesnick MD (2020) on their article **Dissemination of Information During Public Health Crises: Early COVID-19 Data From The Laryngoscope** described that information sharing through medical journals in a timely manner will help to maintaining a robust peer-review process, also, they developed the report and analyzes of publications of "The Laryngoscope". The authors adopted methods of comprehensive review process of two databases (PubMed and The Laryngoscope). The data were collected from "The Laryngoscope" during the first 4 months of the pandemic and were identified and compared to manuscripts pertaining to historic pandemics (published in The Laryngoscope during the first 2 years of each outbreak). The authors were concluded with The Laryngoscope rapidly disseminated quality publications during the COVID-19 pandemic by upholding a robust peer-review process while expediting editorial steps, highlighting relevant articles online, and providing open access to make COVID-19-related publications available as quickly as possible.

Methodology

The methodology adopted for this study in Survey method.

Sampling Technique and Number of Samples

Purposive sampling method is adopted as the survey was conducted among person with disability in Tamil Nadu. The total sample size is 125 and valid sample size is 108.

Hypotheses and Outcome

To know the outcome or role of mass media awareness towards COVID-19 a survey has been conducted and following research questions are framed for hypotheses testing.

Hypotheses

A research hypothesis is a precise, apparent, and testable prognostic statement regarding the probable outcome of research study. This statistical analysis was done with help SPSS software and chi-square, one sample t test and cross tabulation used for obtaining the outcome.

The hypotheses assumed for the study are stated below:

- **Hypothesis 1:** There is no significant difference between **news paper** and **television** on dissemination of information among persons with disability.
- **Hypothesis 2:** There is no significant different between **LD** and **HI** persons on access of information on covid-19 through **Television**
- **Hypothesis 3:** There is no significant difference between **social media** and **Government websites** for accessing information on covid-19.
- **Hypothesis 4:** There is no significant difference between **male** and **female** persons with disability on **treatment quality** for covid-19.
- **Hypothesis 5:** There is no significant different opinion between **LD** and **HI** on **wearing of mask** to prevent the spread of covid-19.

The statistical tools Frequency with Valid Percentage, Cross tabulation, Chi-square is used to test the above hypotheses.

- **Hypothesis 1:** There is no significant difference between **news paper** and **television** on dissemination of information among persons with disability.

Table-1

Sources of Information Dissemination on COVID-19			
	Frequency	%	Valid %
News Paper	8	7.4	7.4
Television	52	48.1	48.1
Social Media	38	35.2	35.2
Government Websites	3	2.8	2.8
Friends and Family	4	3.7	3.7
From Doctors	3	2.8	2.8
Total	108	100.0	100.0

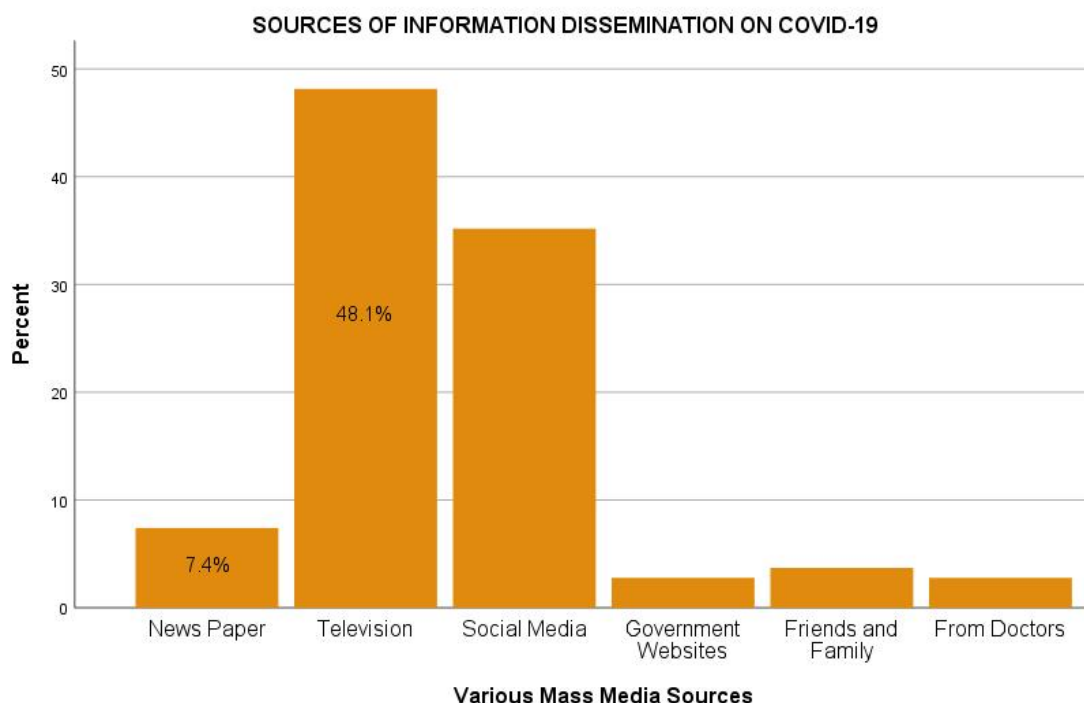
Bar Chart -1

Table 1 & Bar chart 1 provides the information on the sources of percentages of information dissemination on COVID-19. Television media (48.1%) is played the major role on information dissemination on covid-19 among the surveyed sample.

Although news papers are widely circulated to the wider population, they have scored 7.4% on the dissemination of information to persons with disabilities. This could be locked down, the travel ban and the mobility constraint for people with disabilities indicated a lower proportion in the figures.

Since, there is major ratio between the **television** and **news** paper mass mediums among the samples toward dissemination of information on COVID-19, the null hypotheses is rejected.

- **Hypothesis 2:** There is no significant different between **LD** and **HI** persons on access of information on covid-19 through **Television**

Table 2

Accessing information through "Television"				
Type of Disability	Television	Frequency	Percent	Valid Percent
Locomotor Disability	45	92	85.2	85.2
Hearing Impaired	16	16	14.8	14.8
Total	61	108	100	100

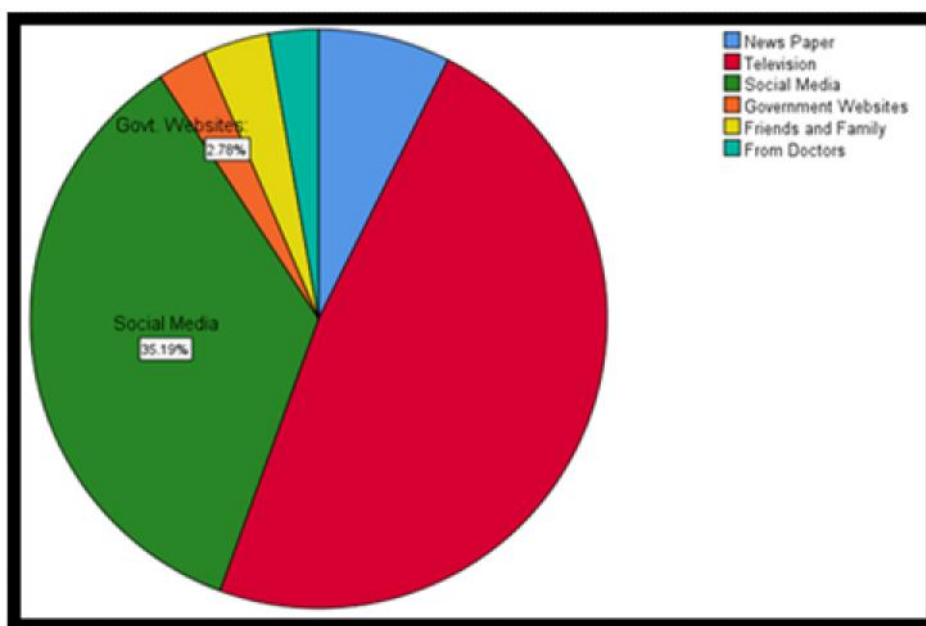
Table 2: Television is the key source of access to information related to covid-19 for people with disabilities. As we all know, most people with a locomotor disability cannot travel easily, move freely and cannot do the hard work that requires physical activity. Even due to lockdown and travel ban, most people with disabilities stay in door and survive with available resources, hence the television become more desirable source for accessing information related to covid-19. The total percentage of Television accessibility is 85.2% for the locomotor disability persons. Since hearing impaired persons can access the information via the sign language which available from some of the selected TV channels, the percentage of accessing to the television medium for hearing impaired persons is 14.8%.

Since there are considerable differences between locomotive disabled persons and hearing impaired persons on accessing information from television media, the null hypothesis is rejected.

- **Hypothesis 3:** There is no significant difference between **social media** and **Government websites** for accessing information on covid-19.

Table 3

Accessing Information on Covid-19: Social Media Vs. Govt., Web Sites			
	Frequency	%	Valid %
News Paper	8	7.4	7.4
Television	52	48.1	48.1
Social Media	38	35.2	35.2
Government Websites	3	2.8	2.8
Friends and Family	4	3.7	3.7
From Doctors	3	2.8	2.8
Total	108	100.0	100.0



Pie Chart - Accessing Information on Covid-19: Social Media vs Govt. Web Sites

Table 3 & Pie Chart present the information on “Accessing Information on Covid-19 using Social Media and Government Web Sites. The social media recorded the percentage of 35.2 while Government website recorded the percentage of 2.8. As these both the medium require the internet package for accessing the information, social media provided the more information on covid-19 among the the surveyed population. Since, there is major percentage difference between the **Social Media** and **Government Website** on accessing the information on Covid-19, the null hypotheses is rejected.

- **Hypothesis 4:** There is no significant difference between **male** and **female** persons with disability on **treatment quality** for covid-19.

Table 4

Gender * treatment Quality – Cross tabulation								
			Treatment Quality					Total
			Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	
Gender	Male	Count	13	50	22	2	2	89
		% Treatment Quality	12.03%	46.29%	20.37%	1.85%	1.85%	82.4%
	Female	Count	1	8	10	0	0	19
		% Treatment Quality	0.92%	7.40%	9.25%	0.0%	0.0%	17.6%
Total		Count	14	58	32	2	2	108

Table 4 evidence indicates that there is a substantial gap between male and female persons with disabilities in the quality of treatment for covid-19. In terms of treatment quality for Covid-19, males with disabilities share 12.03 percent, 46.29 percent, 20.37 percent, 1.85 percent and 1.85 percent, respectively, are very satisfied, satisfied, neutral, dissatisfied and dissatisfied. Females with disabilities share 0.92 percent, 7.4 percent, 9.25 percent, 0.0 percent, 0.0 percent, respectively are very satisfied, satisfied, neutral, dissatisfied and dissatisfied.

Since there is significant difference in the percent between male and female on treatment quality for covid-19 disease, the null hypothesis is rejected.

- **Hypothesis 5** :There is no significant different opinion between **LD** and **HI** on **wearing of mask** to prevent the spread of covid-19.

Table 5

Do you think wearing a mask will help to prevent the spread of the virus?				
	Yes	No	Unsure	Total
Type of Disability				
Locomotor Disability	76 (70.37%)	05 (4.62%)	11 (10.18%)	92 (85.2%)
Hearing Impaired	12 (11.11%)	01(0.92%)	03 (2.77%)	16 (14.81%)
Total	88(81.48%)	06 (5.5%0	14 (12.96%)	108 (100%0

Among the samples of a person with locomotor disability and hearing impaired disability, the table-5 provides the information that there is a significant difference is there between the types of disability with awareness on preventing of covid-19 by wearing mask. Around 76 percent locomotors disability persons said “Yes” on wearing of mask will prevent the covid-19 spread. 5% said No and 11% said “Unsure”.

Around 12% of hearing impaired persons agreed on wearing of mask will prevent the covid-19 spread and 01% said “No” and 3% said “Unsure”. Hence there is significant difference is available between the locomotor disability versus hearing impaired persons. Hence the null hypothesis is rejected.

Conclusion

In the course of acquiring knowledge, information about a specific subject involves a great deal of work to acquire consciousness. Governments across the globe, NGOs, World Health Organizations, medical experts, media practitioners, media units are attempting to disseminate true and viable facts to the general public, especially people with disabilities. The accessing of knowledge using different mass media channels requires certain skill sets and electronic gadgets, such as android phones, computers and internet packs.

Through this study, people with disabilities (LD/HI) in Tamil Nadu tend to have adequate knowledge about COVID-19 using various mass media channels such as television, news, social media and websites. The study also showed that a person with a disability is able to access information disseminated across different mass media outlets by the various stakeholders. People with disability are in need of correct and precise information on COVID-19, therefore they could gain the awareness of pandemic situation for adopting the do’s and don’ts during the pandemic period.

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