EFFECTIVENESS OF HEALTH RISK COMMUNICATION DURING PANDEMIC: AN EXPLORATIVE STUDY

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ABSTRACT

This article attempts to analyze the strategy adopted by the government of India to combat the COVID 19 pandemic, motivating people to take vaccine and addressing the issue of vaccine hesitancy. The study is based on the close review of various digital media platforms utilized by the government of India majorly the website and Facebook page of the ministry of Health and Family Welfare and awareness videos on YouTube. The results include a list of crucial gaps that have not been paid attention to or were ignored during information-based content development and dissemination via the official digital platforms. Also, a major gap was recorded in the set of information available in English, Hindi, and Vernacular languages. Vaccine hesitancy was one of the major issues during the pandemic. The study suggests that the issue of vaccine hesitancy was also under-addressed.

Keywords: Covid-19 Pandemic, Health Communication, Vaccine Hesitancy, Digital Health Communication, Covid Awareness.

INTRODUCTION

On March 11, 2020, WHO declared the outbreak of public health emergency of international concern and announced the spread of COVID-19 as a pandemic. (WHO Director General's Remarks, 2020) It has been past one and a half years since then and health ministries across the nations are still struggling hard to fight against the deadly virus costing innocent lives.

In India, the first case of COVID 19 was reported on January 30, 2020, and within 3 months the number grew to 1498 with 45 deaths (Times of India, 31 March 2020). After 14 hours of Janta curfew (people's curfew), 21 day's strict lockdown was announced on March 24, 2020, India received international praise for implementing the lockdown during the times when most of the leading economies were escaping it despite the severe community spread. In a research report of Oxford University (2020), India scores highest in the implementation of the strictest lockdown. However, India's battle with COVID 19 has undergone a see-saw effect since then.

The government gained international praise for the immediate strict actions to control community spread and the development of vaccines but received a huge amount of criticism in the land for not being able to provide for the rural migrants and daily wage workers. The mass migration with thousands of people walking hundreds of kilometers to reach their homes was labeled as insensitive decision-making by the ruling party. It is the biggest mass migration after the partition of India. (Mukhra et al, 2020)

On 16 January 2021, India announced the COVID vaccination drive with two 'made in India' vaccines. The priority was given to the medical fraternity and the people above 45 years of age. The first level target was to vaccinate about 300 million people by July 2021. But while the vaccination drive was yet to take a high swing; the country got hit by the second wave of COVID 19. Thousands of deaths every day, an increasing number of cases, and people's reluctance towards the COVID 19 protocol & vaccination drive turned the situation worst and distressing. According to the official data released by the Ministry of Health and Family Welfare; the vaccination

drive that started on January 16, 2021, could deliver 202,695,874 doses till May 26, 2021. Only 3% of the total population received both doses while around 11% received the first dose. A month later June 26, 2021, the total headcount who received vaccination superseded the estimated figures and achieved 30,79,48,744. If we compare percentage-wise, the number of first shot receivers increased by 5 % only in a month; while the total population to receive both the doses increased only by 1%. On June 26, 2021; the total population to receive the first dose was 16% while only 5% received both doses. The ratio is not encouraging. More so, because the vaccine is seen as the holy grail to encounter the virus or to minimize its impact on human bodies.

In the past also, the pandemics (SARS in 2003, H1N1 Flu in 2009, MERS in 2012, Ebola in 2014, Zika Virus in 2016) have raised the government's concern regarding health infrastructure, miscommunication, accessibility and affordability of the treatment, and accountability. In such situations, the spread of health communication takes utmost priority. Especially, because managing public health crises requires responsible and disciplined mass behavior that can only be achieved through effective health communication. The idea is not only to provide information but also to influence the mass to accept and co-operate towards the pandemic protocols and safety drives. (Regider E, et al 2007). It is also needed to build the people's trust in the efforts being made by the health authorities and associated workers. Strasser and Gallagher (1994) stress upon providing accessible, understandable, actionable, credible, relevant, and timely information through a chain of policymakers, individuals, communities, and local, within the country and worldwide health care providers.

With the predictions of third wave and delta virus; India has the bigger challenge of combating two- the pandemic and the infodemic. Spread of false/ inaccurate/ incomplete information, indecisiveness by the policymakers, restricted access to the verified data or studies and intentional or unintentional ignorance towards the communication processes cause severe damage to the overall crisis. Diverse socio-economic conditions, intellectual and education differences, digital engagement and literacy issues, language diversity and behavioral patterns of the people turn the situation for the worse (Finset, A et.al, 2020). A close evaluation of previously published reports and articles on communication during a health crisis, reveals that people's behavior and attitude towards the health emergency is guided by various physical intellectual and psychological factors, including Exposure to the information, severity of health emergency; the reliability of the information system, mass media and the policymakers; understanding of the chances of catching an illness; Understanding of the role of an individual in combating the disease and the advantages of responsible health behavior, and Strongly held traditional/social/cultural belief systems (Porat, T. et.al, 2020 & Hyland-Wood, B. et.al, 2021). People in the severely affected countries tend to show low level of trust over the information system calling for a special need for systematic efforts for to record the feedback from the public and facilitating an open two-way communication platform for faster and effective management of pandemic (Varghese NE et.al 2021).

'Risk Communication', 'Pandemic Management' and 'Health Communication' have emerged as a few of the most popular areas of research studies in the last two years. Many national and internationals studies have been published widely dwelling upon the key issues and concerns relating to the patterns of information dissemination, attitude and response of the people, trust over the information system and concerns over mass behaviour (Erica K. 2021; Mheidly, N, 2020; Liu Q, 2020). In India, a mix response was seen by people and media towards the initiatives by the Ministry of Health and Family Welfare to combat the pandemic. However, no specific study has been conducted so far to analyse the communication strategy adopted in India with specific reference to Covid 19 management and vaccine hesitancy.

RESEARCH QUESTIONS

The study attempts to evaluate the initiatives of information dissemination information reception and required actions regarding India's communication strategy towards combating the pandemic. An effort has been made to discuss the significant gaps in the

Information Dissemination and Communication by the government of India about COVID19 management. Thus, the study attempts to investigate on the following research questions:

RQ1. What are the key platforms and sources utilized by the MoFHM, Government of India to disseminate information relating to COVID 19 Pandemic?

RQ2. How effective is the information management and dissemination system adopted by the MoFHM, GoI?

RQ3. Are there any gaps with regards to information management and dissemination strategy adopted by the MoFHM, GoI for Covid 19 management and?

RQ4. What specific efforts have been made by the MoFHM, GoI to combat vaccine hesitancy among the people in rural and urban areas?

RESEARCH METHODOLOGY:

The study is exploratory in nature and is primarily dependent upon a mix of primary and secondary data. The primary data for the study was recorded through the close study of various digital platforms being used by the Government of Indian and Ministry of Health and Family Welfare (MoHFW) for the information dissemination during the Covid 19 Pandemic. The study attempts to examine the contents uploaded on the MoHFW and GOI digital media platforms. To collect the secondary data for the study; researchers referred to the news articles, reports by independent bodies and national and international organisations working in the area of health and community development. Researchers analyzed the policy devised by the Ministry of the health of India and the digital platforms of the information dissemination including the website, app, and social media pages of the MoHFW.

THEORETICAL FRAMEWORK:

The present research attempts to evaluate the COVID 19 communication and information system in India keeping in view the Information Diffusion Theory developed by Rogers E.M (1962). The theory (Fig.1) highlights five levels that affect the informed adoption or rejection of new ideas/ behavior/ attitudes. As per the core assumptions of the research, making people aware of the updated and verified information with the help of mass media and change agents is the baby step. The purpose is to invite people to seek more information and create a chain of communication further. At level two, the focus shifts from the public to the group of early adopters and motivates them to become the opinion leader and communication agent for the remaining population creating multiple and multi-level chains of opinion leaders to enlarge the pool of active audience. Consequently, the active audience will undergo behavior change and will show a more balanced approach in evaluating the information coming their way. Attracting people to gain knowledge about the innovation is greatly influenced by their prior conditioning, pre-existing norms of the social system, socio-economic characteristics, personality variables and communication behavior. Those who successfully accept stage one land at the second level of 'persuasion' and dive to confirm and evaluate the newly gathered aspects on different parameters including the relative advantage of replacing the pre-existing knowledge with the newly acquired one; the compatibility and complexity check and the opportunity to apply the information.

The Risk Communication Model (Seeger et.al. 2018) can be seen as the extension of the information diffusion model with a specific focus on risk communication. It dwells into details of each stage of the diffusion model and explains the characteristics of media messages published with the agenda of mass dissemination and influencing mass behaviour. The model majorly pays attention to the factors including the construct and process of messages, crisis conditions, existing knowledge, attitudes and behaviours, demographics and previous experience of the target audiences, larger issues context, misinformation, and competing/conflicting messages.

About health communication during the pandemic, it is important to inculcate that concept of 'new normal' is in contrast with the pre-existing life forms. Reluctancy towards the COVID appropriate behavior including the vaccination drive, hesitancy towards accessing the medical help, and compatibility of covid norms with that of pre-existing personal belief

of an individual. Behavioral change is the core of health communication. This also means that the mass media messages, and public communication need to be designed keeping in mind the diversity of the audience, their exposure, and set of references and experiences. Referring to both the above-mentioned models, this article attempts to evaluate the health communication plan adopted by the Department of Public Health and Family Welfare India on the following five contextual factors-Information Source, Attitudes and Behaviours, Demographics, Misinformation and Competing/Conflicting Messages.

DISCUSSION AND ANALYSIS:

Risk communication cannot happen in isolation. It includes an array of concerns from personal to social and political to economic. During times of health emergencies, the citizens seek to trust in the government for the preparedness and transparent process of information disbursal. Similarly, it is crucial for the governments also to have unquestioned public trust and support. According to the guidelines of risk communication issued by the World Health Organization; understanding between government and people; during the pandemics can be achieved only through communication interventions and accessible services. It should be supported with a set of multiple messages that present the information transparently and understandably apprising the community about the associated risks, instructions for self-efficacy and care; and details of communication help/chain.

It is interesting to note that India did not devise any specific communication strategy to educate people about the pandemic and self-care until the vaccination drive started. The strategy that focuses mainly on the vaccination drive was announced on the website of the Ministry of Health and Family Welfare on January 30, 2020. However, in line with the WHO guidelines, India's communication strategy for COVID 19 also focuses on three major areas: Timely, Accurate, and Transparent dissemination of information to equip and motivate people for informed making up their minds. Strategy makers admit that there is a great level of eagerness, hesitancy, and anxiety among the common people, especially with regards to the efficacy of the vaccine and the outcome of the pandemic.

COVID-19 pandemic has posed challenges that are not easy to encounter; issues of rapid community spread, health infrastructure, herd/mass immunity, general health awareness and behavioral training which includes social distancing, wearing masks and following the COVID-19 protocol, are crucial to be communicated within the community. A diverse country like India must address the above-mentioned concerns at multiple levels. Communication strategy to combat COVID 19 and educating community about the personal and social hygiene and other significant precautions could only be possible through a massive multi-level communication campaign. Such strategies mainly focus upon the timely, accurate and clarity about the status of the pandemic and alleviating the acceptancy level of the vaccine. The communication strategy adopted by the Ministry of Health and Family Welfare of India can be understood at three levels. Firstly, engaging social influencers, experts, and opinion leaders to talk about the efficiency of the vaccine and the process of immunization. Secondly, the establishment of National Media Rapid Response Cell to ensure the real-time redressal of people's queries related to the pandemic; and to monitor the media messages & social engagement. Thirdly, identifying the frontline workers and community leaders to work and engage with various communities, at multiple levels. The strategy aims at addressing the broad areas related to the vaccine, people's trust in the process and effect of vaccination, ensuring the sustainment of COVID appropriate behavior. It is planned to involve various celebrities and other social opinion leaders to disseminate positive and trustworthy information about the COVID protocol and vaccination drive.

In India, health is managed by the state governments with the primary responsibility to manage and avert health crises. However, the Centre holds the responsibility of policy formation and formulation over the imposition of lockdowns, restrictions over international exports and travel, drug availability and protocols, nationwide procurement policy of emergency supplies, and the pivotal aspect of screening in one or the other form. An important unit of MoHFW-the National Center for Disease Control, has

National Risk Communication Plan which was adopted in 2016. The plan aims to work at three levels- Interpersonal (with health care professionals), Personalized service based in the form of dedicated helpline service, and employing mass communication tools including social media, press briefings, news reports on TV, Radio and in newspapers, public announcements, etc. It is noteworthy that the center did not update/developed any specific communication plan to combat COVID 19.

An analytical review of the strategy and implementation of communication to combat COVID-19 highlights multiple issues at the deeper societal levels. Given that around 65.5(World Bank estimates) population in India lives in the rural areas; the digital divide at the community level came up as an issue while addressing the health concerns during the pandemic. In a statement of K. Srinath Reddy, The President of the Public Health Foundation of India; published in Voice of America News; said that "two-thirds of India is rural. If you do not vaccinate them in adequate numbers, there will be huge reservoirs or susceptible persons which the virus or any new variant can attack and them come back to urban areas."

The Supreme Court of India in its order on May 31, 2021, expressed its concern over the unavailability of digital platforms in rural areas. "There is a technology divide between urban and rural households. Vaccination policy relying on a mobile app would be unable to meet the target". The court expressed that the marginalized sections of the society will bear the brunt of this digital divide and it will have serious implications on the fundamental right to equality. The court expressing dissatisfaction over the registration process for the vaccine said that it is not possible to expect people from rural areas to register on the vaccination app.

Using an app to register for the vaccination drive involves three important factors: Availability and affordability of smartphones, connectivity of the internet and incomplete knowledge about how to use the technology. According to the latest survey published by India Today in February 2021; the availability of the internet especially in rural households is quite low. The survey reveals that Only 23 % of the rural population in Kerala has internet access. This figure is 51% in urban households. Similarly, Andhra Pradesh has only 30% of rural households with internet access. In certain States, only 7-8% of rural households have any access to the internet while in urban areas only 18% and 21% of the population (respectively) have the facility to avail the internet. The data on internet accessibility is not so exciting in other states as well. In such circumstances, the management of vaccination drive through digital platforms limits its reach to the wider population. Low digital literacy in urban and rural areas of the country is another significant factor.

Language is another significant factor while assessing the communication strategy. India being a land of diverse cultures; language and dialect is one of the foremost issues that the system has to encounter. The websites of ministries and government departments are the main source of information, instruction and updates. A close examination of the websites of central government's ministries and departments reveals that the information is provided in Hindi and English, only. The page with information in English was found to be fully updated with the government reports, advisories, SOPs and guidelines, however the no frequent updates were made on the pages in Hindi.

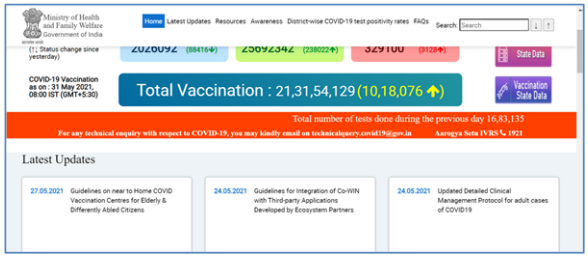

Figure 1 (Website information in the international language)

Figure 2 (Website information in the national language)

Above mentioned picture clearly shows that the updates provided in the Hindi language

are around 5 months old while the updates in English are the latest. This leads to the information gap by keeping one set of the population up to date while ignoring the others. Hindi page of the MoHFW's websites lacks the details of latest advisory and SOPs like Guidelines on near to Home COVID vaccination Centers for Elderly and Differently Abled Citizens; SOP for COVID 19 vaccination of persons without prescribed identity cards; Illustrated (revised) guidelines for Home Isolation of Mild/Asymptomatic COVID 19 cases and Reimbursement of OPD medicines to CS beneficiaries: Special Sanction because of COVID 19. All of these are the information that is a must for every segment of the community.

The language diversity can also be seen in the creative ads published on the website. English creatives are published on the Hindi page of the website.

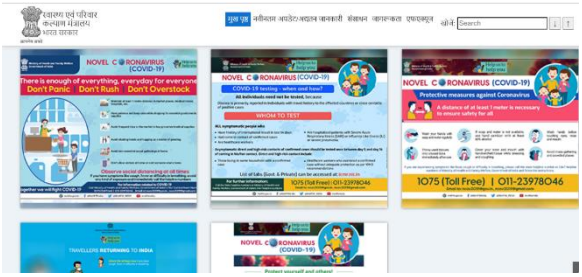

Figure 3 (Language diversity on the website of Ministry of Health and Family Welfare)

The COVID19 management app and the website - Cowin is primarily operating in English. As per the news reports circulated on May 18, 2021; the app was to function in Hindi along with 14 other vernacular languages by the last week of May 2021; however, it wasn't done till this article is being written. Language becomes one of the most crucial and primary factors of information dissemination especially when it deals with a situation no less than a health emergency. In a country where 43.63% of the total population uses Hindi as their first language and around 57.09% of people speak Hindi as first/second/third language; Information relating to health risk, pandemic management, and SOPs in English, limits the dissemination of knowledge; which according to the Roger's Information Diffusion Theory, is the first stage towards the informed decision making.

The Drug Regulation Authority in India approved two vaccines reiterated that India is undergoing the largest vaccination drive in the globe (Kesselheim et al., 2021). Here, the rightly pointed need is to follow the public communication and science messages to frame the structure accordingly. The same views and intentions have been expressed by Union Health Minister and Prime Minister. The contrary views have been presented on the approval of both vaccinations and programs have included arguments around political influence, institutional processes, conspiracy theories, and opinions towards anti-vaccination(Ghosh, 2020). The data analyzed from the survey steered in India presented that a total of 1100 respondents was taken out of which 53 per cent of participants were unsure about taking COVID-19 vaccination(Lazarus, Ratzan, Palayew, Gostin, et al., 2020). This was supported by the reasons for hesitancy which includes unavailability of information regarding immunity level, side effects, and level of efficiency(Lazarus, Ratzan, Palayew, Gostin, et al., 2020). There are numerous other whys and wherefores for vaccination hesitation includes the perception that vaccination will not have desired effect and the assumption that they will not be attacked by the virus. The WHO's SAGE- Strategic Advisory Group of Experts on Immunization defined that hesitancy towards vaccination is due to behavioral facts. The recognizable facts for vaccination hesitancy are that hesitancy and demand for vaccination are not concordant, because an individual or a group may accept the vaccination, but their demand couldn't be of a specific vaccine. Hence, the communication strategies are to be followed for effective negotiation, tracking, and shaping the perception of vaccination programs. The communication strategy for COVID-19 vaccination in India should disseminate the information with high accuracy, transparency, and time to decrease uneasiness about the vaccination and ensure its receipt and inspiration uptake. A wise strategy will help the respective governments at national, state, and regional levels to follow communication strategies so that information on coronavirus vaccination reaches all areas across the country.

There are four major focus areas on which the interventions should continue under

communication strategy are appropriate behavior of staff, vaccination hesitancy, information on the COVID-19 vaccines, and vaccine eagerness. Appropriate behavior of staff including the sustenance and maintenance of all the coronavirus prevention measures such as handwashing with soap or alcohol rub, wearing a mask, and following social distancing measures; is the most important factor to gain public trust and inculcate pandemic appropriate behaviour. (The Lancet, 2020). Staff should behave politely and kindly for providing a prompt, reliable, simple, and focused discussion on the coronavirus vaccination process (Malik et al., 2020). The clarifications regarding coronavirus vaccination will include the audience, trials under which vaccination has gone through, accessibility of the vaccine, registration process, and post-vaccination support and care. Staff should ensure acceptance and understanding to overcome the concerns of people. Humbleness should be there in staff to make people understand and wait to get vaccinated(Schulz et al., 2020). During this time, healthcare workers should ensure that they deliver accurate information that discourses the knowledge gap amongst the public. The public should be made confident about the effectiveness and protection of the coronavirus vaccination. There would be many concerns and hesitancy among the people which need to be tackled by community engagement, delivery of IEC material, research on the provision of vaccines, and monitoring through digital media(French et al., 2020).

Government communication is seen as most crucial and sensitive during pandemics. India runs several vaccinations and immunization programs by collaborating with manufacturers and institutes of the world. Remarkably, India is running a vaccination drive where billion of people are going to get vaccinated against coronavirus. India plans to receive and utilize around 500 million doses against pandemics and immunize 250 million people by July 2021 (Pai et al., 2020). Vaccination to billion people including adults for the first time is a challenge for the country. The vaccines have been designed to prevent coronavirus symptoms and not the viral infection which starts at the initial stages. The government is focusing to mobilize the resources to deliver vaccines in the initial stages. The services are well described by the officials to deliver the services depending upon the pre-existing health conditions of India. Private and public sectors both will be involved to cover the population groups and serve the government in a free-market model. Vaccination is being done for the 'public goodness' and reducing the vulnerable impact of pandemics (Schaffer Deroo et al., 2020). Thus, it requires clear communication with the individuals to present the available information reading injectable vaccines which have been designed to prevent symptomatic coronavirus infection. Numerable risks are associated with coronavirus vaccination and individuals may ask when they are vaccinated. The staff needs to follow appropriate attention to the concerns humbly. Moreover, there is increased risk when the immunized person gets attacked with the virus and harbors for some time. During this time, there are high chances of transmitting the virus to others. So, staff should communicate with immunized members that appropriate measures should be followed as this is the appropriate behavior to prevent coronavirus infection. This will greatly help in the reduction of transmission of other microbes causing tuberculosis and the influenza virus(Jain et al., 2020).

Government communication plays an imperative role in creating awareness, analyzing the situation, and taking appropriate measures(Chitty, 2018). Several problems occurred during the coronavirus outbreak, and they could be addressed by following the communication strategies. General Systems Theory refers to the collection of tools, problems, principles, and methods associated with the systems. Here, the system is a sequence of several components that work hand in hand with each other to form a whole. It relates to the list of assumptions, definitions, and suggestions to deal with reality as a combined hierarchy of organizations matters and energies. The general systems theory will be followed that presents the association between the communal constructions and communal interface. Moreover, it helps in understanding the interconnectedness of communication by looking at several measures of coronavirus vaccination drive. Therefore, systems theory involves complex organizational processes that are required to achieve important goals (Stichweh, 2000). Systems theory plays an

important role in communication because it allows the development of strategies for individual or group communication (Stichweh, 2000). Communication is done with those who are under at least one system. Once the role of communication in the public is realized then it becomes easy to take decisions and actions for effective results. In communication, systems theory helps in identifying the shortcomings within the individual or organization. This can be interpreted with an example, that patients with serious health issues cannot only be recovered by the efforts made by the doctor. Though, identification of the problem along with its causes and following steps helps in effective communication and better results. The advantage of This state of the theory as it takes a narrow look to understand and expand the view of the whole problem into a definite solution with interpersonal communication. As per the General Systems theory, good standards and safety of patients are the major properties of the healthcare system. It follows different elements in healthcare systems by piloting the analysis on equity, advocacy, media engagement and social media, community participation, crisis communication, transparency, and capacity building to build trust and eagerness. These elements contribute to improved healthcare outcomes in the system. If the world wants to get over this coronavirus outbreak, vaccination is important irrespective of social and economic conditions. All the sectors and individuals like the children's, health sector, employment, and businesses have been affected due to this outbreak. Vaccination is very important to get life back to normal(Williams & Cooper, 2020).

The development of an effective advocacy communication strategy helps in the development and handling of the work efficiently by targeting the specific population group who are influencers of making change (Feemster, 2020). This is essential to get success by undertaking important factors of the knowledge for communication. Health advocacy in coronavirus vaccination aims at engaging a greater number of people by creating awareness on the positives of vaccination. Experts and influencers should broadcast at national, state, and regional levels. The experts and influencers are parliamentarians. Members of the Public Health Associations, healthcare professionals, media representatives, public and private organizations, civil servants, development bodies, faith-based leaders, and religions. They can help in spreading the messages to the target audience through various communication channels in both developed and underdeveloped areas (Kesselheim et al., 2021). IEC material is here of greatest advantage as it includes frequently asked questions, fact sheets, and sources of multimedia in language versions. Healthcare partners should first develop adequate material for the launching of vaccination to motivate and create awareness among people. The media agencies in respective states should be organized in a manner that they deliver their part well (Feemster, 2020). Thus, this will allow the proper dissemination of information through stakeholders and local channels. Moreover, the professional bodies will be grasping the youth organizations and committees to support the implementation of coronavirus vaccination with effective communication.

The coronavirus vaccination can reach the public with the use of social media with a positive influence on the citizen's Engagement of media is required at all the levels such as national, state, and local. Digital media plays an effective role in covering massive people quickly. This strategy is cost-effective and in the outbreak of coronavirus, communication ensures consistency, amplification, and instant message delivery through the practice of digital channels(Chen et al., 2020). The content delivered through social media should ensure that it is verified and builds trust among people. This is the responsibility of respective state governments to ensure the influence of digital media over the population of that area.
Mobilization among people focuses on community participation and risk communication. Community mobilization and public contribution ensure that all the information people perceive is correct and according to the standard procedures(Marston et al., 2020). The plan should be implemented in phases and addressing the queries of the population regarding coronavirus vaccination. The population of India varies at every five kilometers based on culture. They have different perceptions and beliefs towards each thing, so coronavirus vaccination staff must be prepared to address all the concerns of the

public. Moreover, the population of the country is divided into urban and rural regions, tribes, and non-tribes where it is hard to reach.

The system and delivery of the coronavirus vaccination should follow the principle of transparency in the system to share the pertinent data exclusively to the people who are highly hesitant to get vaccinated. The information exchange process should be clear and transparent within and outside the organizations. Information among staff needs to be transparent so that they can direct and encourage harmonization between the systems. Governments need to focus on the communication process and monitor and evaluate whether adequate information is delivered to the required people or not (Spalluto et al., 2020).

Effective communication strategies for the response to pandemics:

Communication plays a crucial role in maintaining the confidence of the public regarding vaccination. Having effective communication requires planning and resource availability enormously which must be in place before the vaccination drive begins Several factors define coronavirus vaccination safety as the perception of people, safety issues, risk communication, and prioritization to vaccine response. Vaccine communication is done to promote the safety and efficacy of coronavirus vaccination, so people should be empowered with evidence-based information and choices about vaccination. Written or verbal that is any communication approach should be developed to build trust and encouragement about the delivery of vaccination through the transmission channels. Reliable, evidence-based, and understandable information should be shared on vaccination safety among different geographical locations in their vernacular languages. The proposed framework that the governments should follow in transmitting the information is as follows:

Active provision of the coronavirus information and identify risks along with the best strategies for response and control. The management of communication through the media transmission by holding coordinating with the committees and departments. Further, the recommendations include developing trust among people and sharing the relevant information to those who are directly involved in the care. Sharing the IEC (Information, Education, and Communication) material in vernacular language with front-line workers and social mobilizers is effective method to broadcast the information to community. This will also include organizing

Figure 4: Proposed approach

advocacy events with faith-based institutions and religious leaders to deliver the information in the audio, visual, or written mode. The positive success stories of coronavirus vaccination on media should be highlighted. Relations with the influential groups and society should be built who are directly intricated in delivering coronavirus emergency services. Direct communication stratagems should be adopted so that the community's needs, concerns, and feedback are noted by the government. Effective communication should be followed so that there is no misunderstanding, fear, and confusion related to coronavirus vaccination. Health equity is the major obstacle in healthcare system so the measures should be followed so that discriminated groups are protected from public health crises during a pandemic. Majorly, data assessment and monitoring systems should be in place to document the record of infection and spread of disease.

CONCLUSION AND SUGGESTIONS

Effective communication is the key to deliver effective and adequate information with the active participation of stakeholders. Coronavirus vaccination communication policies and actions are crucial to slow down the spread of infection and raise the recovery rate. The administration should follow the approaches, policies, and actions that reach a large population during a pandemic, especially to the population who needs the information. In this paper, general systems theory has been pronounced along with the elements for effective pandemic recovery. The cross-country analysis has presented that India has adopted the best communication strategy and this is the reason it could cover a large population. The states such as Puducherry, Nagaland, Manipur, Tamil Naidu, Chandigarh, Meghalaya, and Punjab need to improve vaccination performance.

The primary focus of the Indian government should be on directing and alleviating potential disheartened expressions by unmet demand for vaccination or enthusiasm among people. Inscribing vaccine hesitancy that could arise because of vaccination fear concerning the efficacy, safety, misconceptions, and other fallacies, is crucial in pandemic management. Additionally, it is important to ensure that there is sufficient information available on risks relating to pandemic. Addressing the social endorsements from experts and officials to emphasize vaccination safety and efficacy; establishing good relations with digital media; and mobilizing community workers to have engagement within the community at different levels can further be effective in information dissemination through trustworthy sources. Further, there is an urgent need to develop content in Hindi and vernacular languages for the easy mass dissemination else, the digital divide will lead the deprivation of information in the rural areas with the dominant vernacular languages or dialect

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