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| **Author, Year** | **Title** | **Disease (s) Covered** | **Country** | **Aim of study** | **Study Design** | **Population** | **Total number of participants** | **Outcome Measurements** | **Reported Outcomes** | **Reported Barriers** | **Recommendations** |
| Gesser-  Edelsburg  2018 | Correcting misinformation by health organizations during measles outbreaks: A controlled experiment. | Measles | Other: Israel | To evaluate how to correct misinformation on two subgroups | Non-randomised experimental study | Students at Haifa University in 2017-2018 | 243 | Mixed Methods | Trust in the government response,  Intention to seek other information, Intent to Vaccinate. | Not a fully representative sample, short term intervention | Transparency, Address Emotions, Two-way communication, |
| Gillespie 2016 | Social Mobilization and Community  Engagement Central to the Ebola Response in West Africa: Lessons for Future Public Health Emergencies. | Ebola 2014 | Other: West Africa | To identify lessons learned from the Ebola response in West Africa, with a particular focus on C4D | Other: Mixed Methods | Bilateral, International, and  NGO stakeholders working in the 2014 Ebola epidemic | 53 | Mixed Methods | Communication Recommendations | limited scope for interviews, recall bias | Targeted Messaging, Involved Trusted Stakeholders,  Incorporate social mobilization, build capacity in communities, Transparency |
| Bekalu 2018 | The relative persuasiveness of narrative versus non-narrative health messages in public health emergency communication:  Evidence from a field experiment. | General Pandemic Preparedness | United States | To determine whether narrative or non-narrative formats of communication are more persuasive in emergency contexts. | Randomised controlled trial | English Speaking adults over  18 | 627 | Mixed Methods | Knowledge, Response Efficacy | pre-test scores were high and the time interval was short, few outcome variables | Narrative Messaging is more effective at promoting knowledge and response efficacy regardless of  sociodemographic factors |
| Lin 2014 | What have we learned about communication inequalities during the H1N1 pandemic: a systematic review of the literature. | H1N1 Influenza | United States | Characterize communication literature, assess the social determinants and their communication inequalities during pandemics. | Systematic review | Literature on Pandemics and related populations | 84 | Mixed Methods | Communication theories,  Sociodemographic variables,  Modifying Variables. |  | Varied communication modalities and methods, Sustained communication information, Two-way communication. |
| Nowak 2015 | Promoting influenza vaccination: insights from a qualitative meta-analysis of 14 years of influenza-related communications  research by U.S. Centers for Disease Control and Prevention (CDC). | Influenza | United States | To evaluate the information around vaccine hesitancy and potential messaging. | Systematic review | Influenza vaccination literature | NA | Mixed Methods | Major Themes on Vaccination and communication Recommendations. | Vaccine hesitancy, perceived risk of general population | Expand Communication to vulnerable populations,  Communicate safety and efficacy, Incorporate more HCPs and Community Leaders |
| King 2020 | Advancing Visual Health Communication Research to Improve Infodemic Response. | COVID-19 | United States | To provide evidence of the importance of visual health communications. | Case report | NA | NA | Qualitative | Recommendations | Not specifically studied in global pandemic situations, unclear outcomes. | Simple graphics and limited text, Behavior oriented communication, Contextually appropriate |
| Airhihenbuwa 2020 | Culture Matters in Communicating the Global Response to COVID-19. | COVID-19 | United States | To offer a community-engaged communication strategy that focuses on coronavirus dis-ease 2019 (COVID-19) messages in a cultural context. | Case report | people of color in the united states | NA | Qualitative | NA | People of color have less trust in government messaging and are not always targeted in communication materials.  Systemic racism in science does not always acknowledge the needs of people of color. | All communication should include: 1) cultural identity,  2) relationships and expectations, and 3) cultural empowerment. Address the community risks as much as the individual risks. |
| Hsu 2017 | Risk and Outbreak Communication: Lessons from Taiwan's Experiences in the Post-SARS Era. | SARS and General Pandemics | Other: Taiwan | Evaluation of effective communication strategies | Case report | Taiwanese population | NA | Qualitative | Communication System Recommendations | Rumors, | Transparency, Government Consistency,  Coordinated use of Social Media, Inter-Agency Collaboration, Targeted Messaging, Two-way Communication. |
| Anwar 2020 | Role of Mass Media and Public Health Communications in the COVID-19 Pandemic. | COVID-19 | Other: Global | To examine the role of the media in the COVID-19 pandemic and its impact on the general public |  | Media Audience | NA | Qualitative | Guidelines | misinformation and mistrust | Highlight and or restrict information posting to official sources, integrate the media into official health messaging, provide a platform so two-way  communication, avoid politicization of information. |
| Böl 2016 | Risk communication in times of crisis: Pitfalls and challenges in ensuring preparedness instead of hysterics. | Ebola 2014 | Other: Global | NA | Case report | general population | NA | Qualitative | Recommended Communication  Strategies | regionality, culture, media, misinformation, politics | Clear and timely communication, targeted messaging, transparency, admission of unknowns. |
| Leask 2010 | Media coverage of health issues and how to work more effectively with journalists: a qualitative study. | Influenza | Australia | To identify and evaluate the intersection between public health and the media in times of epidemic disease | Case control study | Australian Journalists who report on medical news | 16 | Qualitative | Framing Issues, Source Material, Ethics, Avoiding Fear, Critical Analysis. | Time, Limited information, Potential Bias | Timely Information Dissemination, Narrative  Recommendations, Community Engagement, Transparency |
| Vraga 2020 | Strategies for Effective Health  Communication during the Coronavirus  Pandemic and Future Emerging Infectious Disease Events | COVID 19 | Other: Global | To address Communication challenges | Case report | NA | Na | Qualitative | Information Overload, Information Uncertainty, Misinformation. | News Media, lack of knowledge | Clear messages, consistency, focus on vulnerable populations, communication for the intended outcome  (targeted messaging), Transparency, Address blatant misinformation |
| Finset 2020 | Effective health communication - a key factor in fighting the COVID-19 pandemic. | COVID-19 | Other: Global | Describe the need for effective health communication | Case report | Professionals in health communication, patient education, and health behavior change. | NA | Qualitative | Handling uncertainty, Clinical  Challenges, Promotion of Behavior Change | Political leaders, misinformation | Transparency, Consistency, Prioritize the voice of scientists, acknowledge emotions and concerns,  Include Community leaders, Acknowledge mental health of vulnerable, have guidelines for care. |
| Kim 2020 | An Analysis of Government Communication in the United States During the COVID-19 Pandemic: Recommendations for Effective Government Health Risk Communication. | COVID-19 | United States | Evaluation of COVID19 response in the United States  Government | Case report | NA | NA | Qualitative | Systems Principles and Communication Recommendations, | Failure in preparation, Internal Tension, Political Controversy | Two-way communication, Targeted messaging for the vulnerable, Interagency Cooperation,  Transparency, Adaptivity to novel threats, Early Consistency, |
| Lee 2013 | From press release to news: mapping the framing of the 2009 H1N1 A influenza pandemic. | H1N1 Influenza | Other: Singapore | Framing media content to understand the public perception of H1N1 and its portrayal. | Case report | Singapore Journalists | NA | Qualitative | Framing Method, Emotional Appeals,  Tone | Audience interpretation of information | Sources should be unbiased within credible areas of governments, Provide narrative stories to avoid media sensationalism, Emphasis on trust, and certainty, Rely on Community Stakeholders with  appropriate knowledge |

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| Reynolds 2008 | Effective communication during an influenza pandemic: the value of using a crisis and emergency risk communication framework. | Influenza | United States | To explain the additional uses of the communication framework | Case report | NA | NA | Qualitative | Communication Recommendations | lack of consistency between recommendations and implementation | Minimize Speculation (transparency and clarity),  Consistency, Inclusion of Community Leaders,  Address the bias and skepticism in health reporting. |
| Sutton 2020 | COVID-19: Retransmission of official communications in an emerging pandemic. | COVID-19 | United States | To examine message retransmission on Twitter from public agencies and their efficacy | Cohort study | Public health, emergency management, or official  accounts in the US between  February and April 2020 | 690 | Qualitative | Longitudinal Engagement, Diffusion of Messages, Severity, Message  Feature | Timing of Messages, Political Ideology, Social Media limitations | Clear and Inclusive Language, Transparency and  Sources, Targeted Messaging, Community Efficacy, Narrative Messaging, Non-exclamatory messaging |
| Adam 2020 | Design for extreme scalability: A wordless, globally scalable COVID-19 prevention animation for rapid public health communication. | COVID-19 | Other: Global | To develop a prevention animation that is globally scalable | Case report | n/a | n/a | Qualitative | None | Reaching all age levels and cultures | Eliminate large amounts of text, be culturally appropriate, socially inclusive messages, broad  public appeal |
| Henrich 2011 | Increasing pandemic vaccination rates with effective communication. | H1N1 Influenza | Canada | Establish new mechanisms of communication around vaccination | Case report | NA | NA | Qualitative | Communication Recommendations | Uncertainty about vaccines, Safety, Mistrust, One-way communication | Community Inclusion, Transparency, Two Way communication, Consistent media messaging,  Targeting messaging, |
| HanPKJ 2018 | Communication of Scientific Uncertainty about a Novel Pandemic Health Threat: Ambiguity Aversion and Its Mechanisms. | General Pandemic Preparedness | Other: Spain | Examine the magnitude of ambiguity averse responses to scientific communication, the effects of different uncertainty communication strategies on ambiguity aversion. | Cross sectional study | Spanish Adults on an opt-in internet survey | 2705 | Qualitative | Interest in Vaccination, Perceptions of vaccination, trust in health officials, moderators. | Hypothetical vignettes used, was of single country origin, correlational study. | Address uncertainty, Communicate protective effects over fear-based messaging, Selective use of news media. |
| Gesser-  Edelsburg  2014 | Risk Communication Recommendations and Implementation During Emerging Infectious  Diseases: A Case Study of the 2009 H1N1 Influenza Pandemic. | H1N1 Influenza | Other: Global | To discern how risk communication guidelines for an outbreak of an emerging infectious disease were implemented by local governments throughout the world. | Other: Systematic  Review and Case Control Study | WHO member state Stakeholders | 70 | Qualitative | Communication strategies, Sources of information, Community  empowerment | Trust, difference between WHO guidelines and implementation | Targeted messaging to vulnerable populations, Two-way communication, Transparency, Use of novel communication mediums (social media, internet) |
| Walker 2020 | The 2013-2016 Ebola epidemic: evaluating communication strategies between two affected countries in West Africa. | Ebola 2014 | Other: Nigeria and Liberia | To evaluate and compare the approaches to communication of EVD outbreak in two African countries with vastly different  outcomes; Sierra Leone and Nigeria to elucidate the influence of the communication strategies on success or failure in  managing the outbreak in either country | Systematic review | Articles from 2013-2017 with a focus on communication,  articles based on Nigeria or  Liberia, and human studies and Ebola | 11 | Qualitative | Thematic Analysis, Role of Social  Media | Community mistrust, Stigma | Targeted messaging to most vulnerable, Use of visual aids, Use of narrative Stories, avoiding fear based messaging, Controlled use of social media |
| Barrelet 2013 | Unresolved issues in risk communication research: the case of the H1N1 pandemic (2009-2011). | H1N1 Influenza | Other: Global | To identify communication lessons to learn from past pandemics | Systematic review | Social science productions | 60 | Qualitative | Risk and pandemic perceptions,  Vaccination perceptions, rumors, health risks | lack of consistency between recommendations and implementation | Centralized messaging, cultural considerations, locally planned risk communication strategies. |
| Peinado 2020 | Effectively Communicating About HIV and  Other Health Disparities: Findings From a Literature Review and Future Directions. | HIV | United States | To address current strategies to communicate health disparities and acknowledge the unintended adverse effects of messaging  strategies | Systematic review | US-focused literature | 23 | Qualitative | Health Communication Strategies | Stigmatization and Stereotyping, victim blaming, mistrust | Targeting Messaging, Media Framing (and within cultural targeting), Use of Images over words, Clear messages, Address socioeconomic and  sociodemographic disparities, emphasize community  over the individual, Address Distrust |
| Bozzola 2020 | Global Measles Epidemic Risk: Current  Perspectives on the Growing Need for Implementing Digital Communication Strategies. | Measles | Other: Global | To describe the potential effects of fake news and how digital communication may have to improve and sustain measles immunization. | Systematic review | NA | NA | Qualitative | Misconceptions, Misinformation,  Sources of information, Ways to communicate | Misinformation, vaccine hesitancy | Tailor vaccine messaging through social media listening (two-way communication), Identify subpopulations and their needs, increase audio visual communication. |
| Bedrosian 2016 | Lessons of Risk Communication and Health Promotion - West Africa and United States. | Ebola 2014 | Other: United States and West Africa | To evaluate the various communication strategies utilized in two locations during the 2014 Ebola Epidemic | Case report | General public of affected countries/the US | NA | Qualitative |  | Languages, Literacy, Distrust, Fear,  Misinformation, | Utilization of infographics, use of cultural taboos and differences, community stakeholders, Regular social media use by government organizations, avoid information voids, be transparent, use plain language. |
| Roberts 2017 | Digital Health Communication and Global Public Influence: A Study of the Ebola Epidemic. | Ebola 2014 | Other: Global | To evaluate social network theory and its application to modern health communication management. | Cohort study | Social Media Accounts in the  US and Ebola-affected  Countries around public health expenditures from 2014-2016 | 109400 | Quantitative | Communication Recommendations | Fear, Misunderstanding, Politics | Social Media must be used on the side of public health strategically, Need to devise social media and  misinformation mitigate strategies |
| Nazir 2020 | A Multidimensional Model of Public Health Approaches Against COVID-19. | COVID19 | Other: Pakistan | To evaluate the impact of Social Media on awareness and knowledge, information exchange and preventative behaviors. | Cross sectional study | Social Media Users from different geographical areas of  Punjab and Azad Jammu and Kashmir, Pakistan, from 5  March 2020 to 25 March 2020. | 500 | Quantitative | SNS exposure associated with a -  0.097 regression weight and a p-value of 0.238 on preventive  behavior | SNS had a more significant effect on knowledge and awareness,  sociodemographic factors play a part in the influences. | That Social media can be an effective tool but has to be in the right context and from the correct authorities  and be well maintained |
| Godinho 2016 | Increasing the intent to receive a pandemic influenza vaccination: Testing the impact of theory-based messages. | Influenza | UK | To evaluate evidence and theory-based messaging to increase influenza vaccination uptake | Randomised controlled trial | English Fluent British adults randomly selected | 1424 | Quantitative | Intention to be vaccinated, Effect of the message, predictors of intention  (via means, SD , CI, p value) | not conducted during a pandemic, not wholly representative | Succinct messaging, Risk reduction messaging, |