**TITLE: Misinformation, Informal information and Information asymmetry during COVID-19 times: The ultimate disrupter of health equity**

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**Abstract:**

During the past few months of COVID-19 outbreak we could witness certain health disparities getting surfaced. Of these, there were misinformation which spread like wildfire and leading to unwanted stress, informal information which gained huge people attention despite getting acknowledged by health policy makers and information asymmetry in terms of expensive drugs usage. This letter is a bird eye view of all these issues which have great deal of impact but haven’t faced the light

**Misinformation, Informal information and Information asymmetry during COVID-19 times: The ultimate disrupter of health equity**

COVID-19 outbreak has unleashed considerable ripples of change in the healthcare sector both in the economic and social strata. Over here, we wish to document our perspective on few notable events which has happened in the past few months. In contrast to the previous contagions, COVID-19 was under the stringent coverage of media and continuous downpour of information, both necessary and unnecessary, tickled the nerve of anxiety and uncertainty among general public (1). On other hand, there was a buzz of informal and even non-scientific information pumped in through various sources in instant messaging platforms such as WhatsApp®. For example, the moment when the president of United States of America tweeted about the unproven benefit of hydroxychloroquine in curing COVID-19, people began hoarding unwanted doses of the drug even without indication. There were instances of self-medication culminating in death (2). This is classical situation of misinformation whereby an inaccurate fact originating from a renowned person during disaster times has spread to a wide sector of population by-passing the conventional drug administration channel i.e. prescribed by physicians (3). Unfortunately, healthcare professionals are mostly left perplexed when people raise their doubts regarding these (mis)information because many a times, they lack solid evidence to refute the touted drug. That too, in the case of hydroxychloroquine where a premature scientific data was heavily circulating and when popular public figure is ‘advertising’ it, the enigma expressed by truly well-intentioned healthcare professionals mostly succumb to the cumulative passion of the public to “take something or other”. By the time, genuine randomised controlled trials came up with their results, most post-graduate residents and physicians by themselves have consumed the drug on empirical basis. Ignoring the context of the issue, one of the biggest lessons we had learned during COVID-19 times is the capability of social media to blur the credibility of scientific information and spread it to billions in few seconds.

Second category is informal information channels which is an issue of concern in countries having pluralistic healthcare system like ours. In the absence of specific treatment for COVID-19, wide sector of population began to adopt variety of herbal formulations based on their individual preferences and awareness. One example is ingestion of *Kabasura Kudineer* in Tamil Nadu which was included in the government recommendation and widely much before the first publication on its composition reached the scientific journals (4, 5 and 6). The concoction was generously distributed by most governmental / non-governmental organizations irrespective of its potential benefits and this in due course had led to acute demand for the concoction in the local markets. Though the size of this endemic phenomenon is significant, it seldom reached the attention perimeter of apex scientific bodies. Though the concoction has been provided as supplementary treatment in many hospitals and as prophylaxis to healthcare professionals, there was neither an official nod nor a refutation from the school of modern medicine. We feel that healthcare policy makers should never ignore the micro / meso level influences existing in the society and formulate working guidelines for alternate schools as well. Notable products formulated at alternate schools of medicine should be considered for pre-clinical research and their harms / benefits should be deciphered. In mainland China, the treatment plan for COVID-19 was developed involving a combination of traditional Chinese medicine decoction, acupuncture and few other characteristic therapy and titrated based on severity of symptoms (7). Following this, significant number of clinical trials have been initiated as well. Ignoring a ‘white elephant’ existing in the society since it doesn’t fall under our intellectual parlance might lead to serious intersections at one point of time or the other.

Third and most prudent category is ‘information asymmetry’ existing in the healthcare system especially at private / corporate levels. Information asymmetry can precisely be defined as a situation where one party involved in a contract has access to more information than the other (8). When a patient gets admitted in a critical state, there are high chances of information provided by the healthcare professionals being asymmetric and the level of asymmetry gallops higher in uncertain medical conditions where stakeholders with “profit-only” goals try to market out multiple options with unproven benefits (9). A recent newspaper column penned by a reputed cardiologist threw light on the “Remdesivir effect” and how price of drug was equated to the quality for the consumer (10). Though these constraints pertain mostly to high-profile clients, the phenomenon by which these “magical remedy” drugs are pushed by media and healthcare companies need to be stringently viewed. In the era of “shared decision making” where people suffering from particular disease are provided with “sufficient evidences” to mitigate information asymmetry, uncertainty coupled with COVID-19 might work in an antagonistic fashion (11).

To conclude, though present before the pandemic, the unprecedented outbreak has showcased certain societal phenomena related to healthcare. Firstly, in the light of uncertainty, general public tend to easily get swayed towards the misinformation and only information with rigorous scientific evidence should be transmitted by media / public figures. Secondly, healthcare policy makers should be prudent and critical about informal information steaming from pluralistic healthcare system and this shall help in developing wholesome model of care. Thirdly, measures for reducing the information asymmetry should always be encouraged and this shall restore the trust in healthcare system.

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