

Dissemination of biomedical research via multimedia platforms using existing healthcare frameworks



It cannot be argued that the progress of the modern human is built on the collective curiosity of the ancient; the evolution of modern science however, has taken a much different trajectory when compared to the ancient's thirst for whys and wherefores, our primal curiosity from being a flow of emotions, a function of limbic system, the scientific aptitude has increasingly become almost mechanical and streamlined. And even though the flow of knowledge hasn't stopped, but it has become unidirectional, from a laboratory to the patient. When did the scientific community and general population turn into two opposite ends of a spectrum? But importantly, is parley possible?

When we talk about biomedical research having a global perspective or gain bidirectional exchange of knowledge solely via platforms like scientific conclaves, scholastic education or

modern social media, it is easy to omit those living in underprivileged urban and rural communities, those who have access to none, especially the women, children and the elderly amongst them. So how do we reach them? How do the stakeholders of biomedical research (the clinicians, the researchers and the pharmaceutical industry) positively influence all members of the society, and viceversa?

As a medical student in India and a volunteer for NGO which works with HIV positive population, I've felt that despite all these challenges, there is a rise of the informed cohort, who're receptive to change, but only when they feel reassured with advancements in medicine and not threatened, underestimated or alienated by it.

India relies largely on social healthcare workers and volunteers for delivery of primary health in far reaching areas, as they are relatable, approachable and understand the minutiae of the regional and cultural practices. And when these volunteers were given the right technology and resources, the impact was palpable in just two weeks.

In a crowded street corner of Kunda Basti, Jaipur, India, 50 pregnant women gathered once again for a 15 min focus group session called 'Sakhi Shakti' (Sister Power), it was conducted by Mamta, a govt appointed ASHA (Accredited Social Health Worker). Only two weeks prior to this, I had met with her and proposed a simple experiment. I would regularly send her clips (in total 8 animation videos) and tips for health and hygiene, ante-natal care etc. via social media (Whatsapp), and which she would then elaborate in the regional language for a period of two weeks. I visited the designated centre to put a quantitative tag to her efforts. 76% women could count to tips the danger signs in a newborn, (having converted them into a song).

In this instance, rewards were two faceted. It was not only the women had become more receptive towards science and healthcare as a whole, but this had also opened doors and become a forum for social discourse. It was then, I realized that time calls for having a holistic approach to the 'science' of scientific research. Our methods can't be didactic anymore.

In addition to identifying a voice that is relatable and makes an impact, it is also imperative to understand the communication processes involved, if we want to understand how, biomedical

research is defined, represented and communicated in various societal contexts. This is why we must put existing stratification of healthcare systems to use. Furthermore, we need to amalgamate this to the new information and communications infrastructure such as the smartphones.

With over 6 billion mobile phones subscriptions worldwide, ubiquitous connectivity and access to multimedia resources, smartphones have the ability to serve as conduits for an affordable, personalized two-way intervention system at any time, and location, especially low and middle income countries such as ours. The contextual format and easy accessibility of these technology will require little work on the part of the health worker or the patient, thus ensuring compliance.

Mass media could easily be the harbinger of change in dissemination of biomedical breakthroughs by providing a large interface between local practices and medical research. And at the same time be available for a variety of useful tasks from symptom assessment and management to psycho-education, doctor and resource location, tracking of personalized and targeted treatment monitoring sleep, diet on a day-to-day basis, medication adherence along with being a social helpline and for disaster management amongst others.

Dissemination of research can only be done if technology and healthcare frameworks go hand in hand, but it mustn't come at the cost of shunning traditional and regional practices.

And as Rosalind Franklin quite rightly said, "Science and everyday life cannot be and should not be separated".