

Science Communication: An essential skill for clinicians

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While growing up in the digital age, most of us had the opportunity to witness the development of advanced methods and means of communication. We can fondly remember shifting from searching months' old manuscripts in the libraries to using a smartphone to easily access the latest science in the palm of our hands. This development has not been confined to the scientific manuscripts only. Internet and social media platforms gave an opportunity to any individual interested in any field to develop ideas and share them with a wider audience. This freedom, coupled with the trend of covering medico-scientific news in the electronic and print media has made the general public more concerned about their physical and mental health. However, unfortunately, these developments have not all been very fruitful. In a real world setting where opinions are stronger than the truth, opportunists managed to exploit it to publicize their sociopolitical agenda.¹ Advertisement of quackery, opposition of vaccination drives and defaming of safe surgical procedures have risen to prominence over the recent decades.² These individuals and organized groups generally back their claims with unregulated blogs and fake news websites for spreading pseudoscience.

The spread of such misinformation is prevalent throughout the world. Pakistan, hence, is no exception. Being the 6th most populous country with more than 90% individuals not having a single degree, the medico-scientific illiteracy gains all the more importance.³ Moreover, a religiously and medically pluralistic society with a weak health management system further empowers the miscreants to strengthen their own agenda.

The major contributing factor for the spread of such misinformation is the vacuum created by the lack of trained science communicators and journalists with a background in clinical sciences.⁴ Though advanced research is being carried out at many centers in Pakistan in biomedical and clinical sciences as well as in clinical practice yet its communication to the general masses is negligible. Researchers are focused on reporting their findings to high impact journals that are meant to be read by their colleagues and fellow specialists. Furthermore, even the access to these journals is afforded by only some institutes and that too at a very expensive price. This lack of relatability makes a common man rely on the resources and clinical advice that is often misleading, damaging and, sometimes, even lethal.

Clinicians and biomedical scientists are socially accountable to develop and promote practices that ensure active community engagement. Communicating science in a manner that is easily interpretable by the general public can be quite advantageous. Firstly, patients would have access to the accurate information from an authentic source.⁵ This can significantly decrease the incidence of self-medication, thereby, improving the medication compliance and therapeutic outcomes. Moreover, the clinicians and the academia can capitalize the opportunity as it is a known fact that funding drives science. All national and international entities, generously fund projects that ensure the transfer of benefits to the masses. Science communication can, hence, ensure a persuasive public call-to-action drive.

For effective science communication, the local socio-political perspective shall be taken into account. With a high degree of illiteracy, let alone scientific misinterpretation, the clinicians and biomedical scientists shall make an effort to understand the demands of the local community. Addressing these demands through intelligent storytelling can enhance the acceptance of science. A sense of accessibility, clarity and honesty shall prevail throughout the scientific communication process. Though the scientific manuscripts encourage the provision of the minutest of all the details, while communicating science to the masses a broader picture has to be developed and delivered.⁶ The target audience should be communicated as to how is the study relevant to them in a digestible yet scientifically credible manner. In order to develop responsible science communication in the country, adequate training modules shall be included in the curriculum, both at undergraduate and post-graduate levels. This ensures that the trainees develop themselves as critical thinkers and communicators. Moreover, the academia, clinicians and trainees shall all ensure their active presence on the social media platforms. Establishment of communication and advancement departments in the institutes of higher learning can especially be helpful.

In conclusion, it is imperative to challenge the deceitful propaganda of multiple sociopolitical entities through effective scientific communication and journalism. Appropriate training and research in the field can help in harnessing the potential of younger generation of clinicians to be effective communicators and empathic decision makers. Efforts directed at developing the mindset of having a good societal impact, rather than having a good impact factor only, can be beneficial in developing good scientists and clinicians.

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