The Shifting Environment of Medical Knowledge and the Necessity for Professional Adjustment

Ameen Mosa Mohammad*

Professor of Cardiology, College of Medicine, University of Duhok, Iraq. *Correspondence to: Ameen Mosa Mohammad (E-mail: doctoramb@yahoo.com) (Submitted: 10 July 2022 – Revised version received: 15 July 2022 – Accepted: 09 August 2022 – Published online: 26 December 2022)

Highlights

- Rapid proliferation of medical knowledge,
- Coping difficulties with medical updates,
- Medical challenges in the era of technology

Dear Editor-in-Chief,

The technological revolution maintains leaving repercussions on distinct dimensions of life in different parts of the globe. The world of medicine experiences revolutionary effects in the consequence. The prospects for the domino effects of the technological revolutionary with respect to the world of medicine appear beyond imagination.¹ An unprecedented process of unlimited proliferation of indefinite information in medical sciences occurs. Practitioners and learners of medical majors experience the challenge to remain updated. Patients increasingly turn to online platforms in search for information on interested conditions. Algorithmic advancements critically subject the role of the medical professionals to question.² The inability or unwillingness of the medical professionals to adjust to the present medical environment establishes obstacles for the management of diseases.

Technological advancements brought the medical professionals onto close virtual connection. Researchers from distinct geographical corners of the world contribute to the rapid expansion of medical knowledge. Huge investment in scientific research constituted another essential measure in the flood of the information. Dedicated scientific platforms globally prepared the ground for the publication of novel information.3 The ultimate outcome of the collection of similar preceding variables represents the unimagined update occurring in the medical knowledge. In comparison with the past, the discrepancy in the update of the medical knowledge today is unbridgeable. Figures demonstrated that the medical knowledge doubled each fifty years in 1950. Seventy years later, the figure for the same process dropped to an astonishing seventythree days. The influx of medical information looks equally attention-grapping when global contributions on the coronavirus are reckoned. Between the start of the pandemic and October 2020, an analysis reported the publication of eightyseven thousand scientific papers on the coronavirus by researchers from around the world.4

The positive correlation between the proliferation of information and the medical sciences is undeniable. The more the information the more the advancement. The rapid expansion of medical knowledge brings challenges too for the parties interested in the sciences. Many medical professionals struggle to cope with the pace of the flood of information. Some of them do not manage to remain updated. The outcome represents an unwanted compromise in the management of diseases and the commitment to patients. Close to forty-five percent of patients reportedly receive treatment from doctors whose background is not up-to-date.⁵ Several reasons possibly account for the emergence of this circumstance. Time constrain certainly establishes one. The quick expansion of knowledge poses another challenge for the medical professionals. Technological advancements shrink work opportunities. Google claims that five percent of searches conducted on the platform looks for information on health.

The expansion of the medical knowledge occurs in tandem with the proliferation of information. The process poses serious challenges for the medical professional. It equally presents a golden opportunity for the advancement of medical sciences. The shifting nature of the medical environment necessitates the willingness for adjustment on the part of the medical professionals. Given all the challenges that the quick flood of information poses, the medical professionals still do better when investing time and energy for the sake of background update. The shift in the medical environment does not only takes place. It appears to constantly and quickly increase. Viewed from the previous perspectives, the present writing suggests the investment of efforts on the part of the medical professionals for the purpose of trying to keep the pace with the proliferation of information in medical sciences.

Provenance and Peer-review

Not commissioned, externally reviewed.

Ethical Approval

N/A.

Source of Funding

No funding to declare.

Author Contribution

AMM: designed and draft the study, and conducting the version of the manuscript.

Declaration of Competing Interest

None.

References

- Colbert, G. B., Topf, J., Jhaveri, K. D., Oates, T., Rheault, M. N., Shah, S., ... & Sparks, M. A. (2018). The social media revolution in nephrology education. Kidney International Reports, 3(3), 519–529.
- [2] Meskó, B., & Görög, M. (2020). A short guide for medical professionals in the era of artificial intelligence. NPJ Digital Medicine, 3(1), 126.
- [3] Albujeer, A., & Khoshnevisan, M. (2022). Metaverse and oral health promotion. British Dental Journal, 232(9), 587–587.
- [4] Tasdelen, A., & Ugur, A. R. (2021, October). Artificial Intelligence Research on COVID-19 Pandemic: A Bibliometric Analysis. In 2021 5th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT) (pp. 693–699). IEEE.
- [5] Ahmed, S., Chase, L. E., Wagnild, J., Akhter, N., Sturridge, S., Clarke, A., ... & Hampshire, K. (2022). Community health workers and health equity in lowand middle-income countries: systematic review and recommendations for policy and practice. International Journal for Equity in Health, 21(1), 49.

This work is licensed under a Creative Commons Attribution-NonCommercial 3.0 Unported License which allows users to read, copy, distribute and make derivative works for non-commercial purposes from the material, as long as the author of the original work is cited properly.