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LETTER TO THE EDITOR

Telenutrition: Opportunities after the COVID-19 Era, and Developing Countries' Limitations

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TO THE EDITOR:

Advancements in telecommunications technologies have changed the world dramatically. Telehealth, as a delivery mechanism for healthcare services, is not a new phenomenon, although its use accelerated as a result of the COVID-19 pandemic (1). Because of the main global strategies for controlling the pandemic (quarantine and social distancing), public use of telehealth was required and increased very rapidly. Telenutrition is one of the important parts of telehealth.

According to The Academy of Nutrition and Dietetics' definition, telenutrition is "The interactive use by a Registered Dietitian Nutritionist (RDN) of electronic information and telecommunications technologies to implement the Nutrition Care Process with patients or clients at a remote location, within the provisions of the RDN's state license as applicable" (2). A short review of the literature shows the fast adoption of telenutrition as a method of providing medical nutrition therapy services after the pandemic. For example, in a cross-sectional study in Italy, Gnagnarella et al. reported that before the pandemic, only 16% of Italian RDNs provided telenutrition; this percentage increased significantly up to 63% (3).

Although telenutrition is absolutely effective in circumstances with limited accessibility, and this method of providing services is increasing in developed countries, some barriers may diminish this trend in developing countries, as follows:

Internet Penetration Rate: Access to telecommunications technologies (including the internet) and devices is the most important pre-requisite for telenutrition. The global internet penetration rate (IPR), as of 2025, is approximately 68%, meaning that around 68% of the world's population has access to and uses the internet. Although IPR is completely satisfiable in developed countries, the rate in some less-developed regions is very low. While the IPR in northern Europe is 97.9 %, the rate in eastern Africa is 28.5% (4). In addition, the average national rates often mask the huge unequal access among different locations within a country, particularly between urban and rural regions. In addition to internet access, a sustained and permanent electricity supply is very important. Due to climate change and recent wars, electricity supply is another limiting issue, at least in some regions, mainly in less-developed countries.

People's Traditional Views: Many people feel more confident and comfortable with traditional face-to-face visits by healthcare providers, including dietitians. Therefore, if a face-to-face interview is not possible, people may refrain from using these services.

Health and Nutrition Literacy: Assessment is the first step in the nutrition care process. In order to have an effective telenutrition plan, it is necessary that the patient or client have information and literacy in the field of health and nutrition. They should be able to know food groups, and also recall their diet. Another issue is anthropometric measurements. Precise anthropometric measurement is very important. The telenutrition providers must find a way to reach reliable anthropometric measures in the first session and also in follow-up sessions.

In conclusion, telenutrition has considerable potential for promoting nutrition and providing effective services and consultations. However, in developing countries, it is necessary to overcome the current obstacles and barriers.

Keywords: Nutritional Sciences, Telemedicine, COVID-19, Developing Countries

REFERENCES

1. Martin H., Schofield M., Jimenez E. Y. Tenets for Increasing Access to Nutrition Care Delivered Via Telehealth: Recommendations from the Academy of Nutrition and Dietetics Telehealth Task Force. J Acad Nutr Diet. 2025;125(2):256-268.2).
2. Academy of Nutrition and Dietetics. Practicing Telehealth. [(accessed on 20 May 2025)]; Available online: https://www.eatrightpro.org/practice/telehealth-for-dietetics-practitioners
3. Gnagnarella P., Ferro Y., Monge T., et al. Telenutrition: Changes in Professional Practice and in the Nutritional Assessments of Italian Dietitian Nutritionists in the COVID-19 Era. Nutrients. 2022 Mar 24;14(7):1359.
4. Statista. Global internet penetration rate as of February 2025, by region. [(accessed on 20 May 2025)]; Available online: https://www.statista.com/statistics/269329/penetration-rate-of-the-internet-by-region/