



## Correspondence

**Telemedicine: A promising future for inflammatory bowel disease management**

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*To the Editor,*

Telemedicine is a term that refers to any activity of medical nature that involves communication despite being physically distinct [1]. In other words, it is unorthodox doctor-patient consultation, taking place virtually with patients that may be thousands of miles away from the doctor. Telemedicine means the adequate and appropriate delivery and provision of healthcare across distances [2].

Inflammatory bowel disease (IBD) is characterized by gastrointestinal illnesses that are chronic or remitting inflammatory diseases. IBD is further subdivided into two subtypes: ulcerative colitis (UC) and Crohn's disease (CD) [3]. Recent epidemiological studies have shown that cases of IBD are on a rise in developing countries such as Pakistan [4].

There are numerous difficulties in the timely diagnosis, treatment adherence, financial burden, regular follow ups, awareness, and misdiagnosis of inflammatory bowel disease [5]. All these problems can be linked to ineffective infrastructure, planning and strategies to manage patients with IBD. Studies in well-developed countries such as China show that patients with IBD bear massive financial burden due to the expensive nature of quality healthcare services, and this contributes to non-adherence to treatment [6]. Maintaining regular follow ups is another issue faced by patients with inflammatory bowel disease. A study in Brazil reported a significant reduction in irregular follow-ups during the COVID-19 era, which greatly hindered disease control [7]. Another issue is the lack of awareness regarding the etiology and treatment of IBD. Studies have demonstrated a significant association between low awareness, treatment non-adherence and anxiety in patients with IBD [8]. Anxiety and depression have further increased during the COVID-19 pandemic, particularly in elderly IBD patients [9].

All the major issues that are hindering the control of IBD can be addressed with telemedicine. Telemedicine interventions have shown a positive role in improving quality of life and reducing the number of required clinical visits in patients with IBD [10]. Telemedicine greatly benefits patients who do not have access to high-quality care due to financial or geographical barriers [11]. The results of telehealth interventions have shown to improve treatment adherence, disease activity, treatment surveillance, and knowledge related to the disease itself [12]. In addition to the patients, gastroenterologists have also demonstrated satisfaction with the incorporation of telemedicine in IBD management [13,14]. Telemedicine has also shown great promise in the

management of pregnant females with IBD. An e-health portal is quite feasible for managing a pregnant IBD patient's reproductive and medication concerns during preconception and pregnancy [15].

In short, telemedicine is the most cost-effective, time-saving, and patient-friendly method to promoting patient compliance. Telemedicine can adequately resolve all problems that are encountered in the diagnosis and management of IBD patients. Investment into the necessary infrastructure to make telemedicine more accessible is essential at the government level. A reduction in the cost of telemedicine devices will be conducive to the widespread adoption of telemedicine in clinical practice. Healthcare workers and patients need to be trained to operate telemedicine devices optimally. Collaboration between all stakeholders is critical to ensure a smooth transition to telemedicine-based management of IBD patients.

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**Author contributions**

Faizan Fazal: Study conception, write-up, critical review and approval of the final version.

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### Registration of research studies

1. Name of the registry: Not applicable
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### Guarantor

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### Consent

Not applicable.

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### Declaration of competing interest

The authors have no conflicts of interest.

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