Crohn's disease in Pakistan, a low-income country perspective: difficulty in differential diagnosis and treatment availability

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Dear editor, Crohn's Disease (CD) is a chronic Inflammatory Bowel Disease (IBD) causing lesions from mouth to anus, with symptoms like abdominal pain, weight loss, rectal bleeding, and chronic diarrhoea. Globally, the incidence of IBD is increasing, adding to the healthcare burden. High-income countries use advanced diagnostic methods like colonoscopy, capsule endoscopy, and CT enterography, which require specialized equipment unavailable in Pakistan, making diagnosis difficult. A 2019 study reported 4.9 million global IBD cases, with the highest numbers in China and the USA—both high-income countries with better access to diagnostic resources.[1]

A 2024 study found that in Pakistan, only 22 of 270 registered IBD patients were diagnosed and managed for CD.[2] The high costs associated with diagnosing and treating CD present major challenges in low-income countries, despite a rising number of cases. This letter highlights the diagnostic, management, and systemic healthcare limitations in such settings. Pakistan lacks substantial epidemiological data regarding the incidence and prevalence of CD, likely due to inaccessibility caused by a large rural population, which makes up 61.8% of the total 241.49 million (Pakistan Bureau of Statistics).[3]

Managing CD is challenging, with first-line drugs like Prednisolone, Sulfasalazine, and Azathioprine widely available, even in low-income countries. Surgical options include resection, stricturoplasty, and abscess drainage.[4] However, the challenges include:

- A shortage of experienced medical personnel due to brain drain.
- Low patient awareness leading to delayed diagnosis
- Inaccessibility and unaffordability of biologics
- Diagnostic confusion with conditions like IBS, tuberculosis, and drug-induced colitis.

These challenges lead to delayed diagnosis, causing avoidable severe complications with timely treatment. A study reported that 57.1% of healthcare providers in Asia identified cost as the most common challenge.[5] There are few public healthcare facilities and costly private hospitals; one provider in Pakistan reported CD flare hospitalization could exceed US $5000.[5] Lack of access to follow-up care, medications, and surgery for Crohn's disease leads to poor quality of life, disability, and even death.

The lack of CD reports in low-income countries like Pakistan is likely due to limited access to diagnosis and treatment, making timely diagnosis a challenge in resource-limited settings. To improve CD care, it is essential to invest in diagnostic infrastructure, raise clinical awareness, expand access to biologics and follow-up care, and provide targetted training for medical staff.

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References

1. Wang R, Li Z, Liu S, Zhang D. Global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019: a systematic analysis based on the Global Burden of Disease Study 2019. BMJ Open 2023;13:e065186. doi: 10.1136/bmjopen-2022-065186.
2. Akhtar TS, Ashraf B, Zahid K, Abbas S, Sana A, Khan AR, et al. Evaluation of Factors Contributing to Diagnosis of Crohn's Disease in the Face of Increasing Trend in Pakistan. Crohns Colitis 360 2024;6:otae015. doi: 10.1093/crocol/otae015.

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3. Pakistan Bureau of Statistics (PBS). 2023 Census Data. [Online] 2023 [Cited 2024 January 30]. Available from URL: https://www.pbs.gov.pk.
4. Veauthier B, Hornecker JR. Crohn's Disease: Diagnosis and Management. Am Fam Physician 2018;98:661-9.
5. Rajbhandari R, Blakemore S, Gupta N, Mannan S, Nikolli K, Yih A, et al. Crohn's Disease Among the Poorest Billion: Burden of Crohn's Disease in Low- and Lower-Middle-Income Countries. Dig Dis Sci 2023;68:1226-36. doi: 10.1007/s10620-022-07675-6.

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