

Inflammatory Bowel Disease in Southwest Nigeria: A Multicentre Preliminary Report and Challenges of Diagnosis and Management

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Abstract

Background: Inflammatory bowel disease (IBD), comprising ulcerative colitis (UC) and Crohn's disease (CD), has historically been considered uncommon in sub-Saharan Africa because of underdiagnosis and limited access to specialized diagnostic services. This study describes the clinical characteristics, diagnostic findings, management, and early outcomes of patients with IBD managed at selected tertiary gastroenterology centres in Southwest Nigeria. **Methods:** This retrospective multicentre descriptive study included the first ten consecutive patients diagnosed with IBD between January 2022 and December 2024 across selected public and private gastroenterology centres in Southwest Nigeria. Diagnosis was established using clinical, colonoscopic, and histopathological findings. Demographic, clinical, laboratory, treatment, and outcome data were analysed using descriptive statistics. **Results:** Ten patients were identified, comprising eight males (80.0%) and two females (20.0%), with a median age of 30.5 years (range, 22–80 years). Five patients (50.0%) had ulcerative colitis, three (30.0%) had Crohn's disease, and two (20.0%) had indeterminate colitis. The predominant presenting features were chronic diarrhoea, bloody or mucoid stools, abdominal pain, weight loss, and fever. Colonoscopy with mucosal biopsy was central to establishing the diagnosis. All patients received medical therapy with aminosalicylates and corticosteroids, while surgical intervention was undertaken according to the treating multidisciplinary team's clinical assessment. Most patients demonstrated symptomatic improvement during follow-up; however, two patients developed severe complications that resulted in death. **Conclusion:** This preliminary multicentre study demonstrates that inflammatory bowel disease is increasingly recognized in Southwest Nigeria despite persistent diagnostic and therapeutic challenges. Improved access to endoscopy, histopathology, specialist care, and contemporary medical therapies is essential for earlier diagnosis and optimal management. Larger prospective multicentre studies are needed to better define the epidemiology, management strategies, and long-term outcomes of IBD in Nigeria.

Keywords: Inflammatory Bowel Disease; Ulcerative colitis; Crohn's disease; Colonoscopy; Histopathology; Nigeria.

1. Introduction

Inflammatory bowel disease (IBD) is a chronic, relapsing inflammatory disorder of the gastrointestinal tract that primarily comprises ulcerative colitis (UC) and Crohn's disease (CD). Although these conditions share several clinical and pathological features, they differ in their anatomical

distribution, pattern of inflammation, and disease behaviour. The pathogenesis of IBD is complex and involves a dysregulated mucosal immune response resulting from interactions between genetic susceptibility, environmental exposures, alterations in the intestinal microbiota, and host immune mechanisms [1, 2]. Persistent intestinal inflammation leads to the production of numerous pro-inflammatory mediators that contribute to tissue injury and progressive disease [1, 2].

Patients with IBD commonly present with chronic diarrhoea, abdominal pain, rectal bleeding, urgency, tenesmus, weight loss, fatigue, and fever [1-5]. Ulcerative colitis is characterized by continuous mucosal inflammation beginning in the rectum and extending proximally through the colon, whereas Crohn's disease may involve any part of the gastrointestinal tract and is distinguished by transmural inflammation, skip lesions, fistulae, abscess formation, and intestinal strictures [1, 3, 4]. The disease follows a chronic relapsing-remitting course, often beginning during adolescence or early adulthood, with a second incidence peak reported in later life [1,4]. Long-standing disease is associated with substantial morbidity, including intestinal obstruction, perforation, severe haemorrhage, malnutrition, extraintestinal manifestations, and an increased risk of colorectal carcinoma [1, 5, 6].

Despite decades of research, the precise aetiology of IBD remains incompletely understood. Current evidence suggests that disease development results from a multifactorial interaction between genetic predisposition, immune dysregulation, environmental influences, and alterations in the intestinal microbiome [1, 3, 6]. Additional factors, including cigarette smoking, dietary patterns, vitamin D deficiency, antibiotic exposure, urbanization, and migration from regions of low to high disease prevalence, have also been implicated in disease susceptibility [1, 6–10].

Historically, IBD has been regarded as a disease predominantly affecting populations in Europe and North America, where both incidence and prevalence remain among the highest worldwide [6–8]. However, recent epidemiological studies have demonstrated a steady increase in newly diagnosed cases across many low- and middle-income countries, including nations in Asia, South America, and Africa [7–10]. These trends are believed to reflect rapid urbanization, westernization of lifestyle, environmental changes, and, importantly, improved disease recognition through wider availability of colonoscopy and histopathological services [8–10]. The epidemiology of IBD in sub-Saharan Africa remains poorly defined. Although the disease was previously considered rare, accumulating evidence suggests that it has been substantially underdiagnosed because of limited awareness among clinicians, inadequate access to endoscopy and gastrointestinal pathology services, and the high prevalence of infectious diseases that often mimic

IBD, including amoebic colitis, intestinal tuberculosis, and other causes of chronic diarrhoea [11–13]. Consequently, the true burden of IBD in many African countries remains uncertain.

Nigeria, the most populous country in Africa, faces similar diagnostic challenges. Published data are largely derived from isolated case reports, small hospital-based series, and retrospective studies from a limited number of tertiary centres [1,11–20]. The recent multicentre Nigerian study by Musa and colleagues has provided important evidence that IBD is increasingly recognized across the country, with ulcerative colitis accounting for the majority of confirmed cases [1]. Nevertheless, comprehensive population-based data remain unavailable, and considerable regional variation in diagnostic capacity continues to limit accurate estimation of disease prevalence and clinical outcomes.

Beyond epidemiological uncertainty, the management of IBD in Nigeria is challenged by delayed presentation, restricted access to colonoscopy, advanced cross-sectional imaging, histopathological expertise, biologic therapies, and multidisciplinary specialist care. Many patients also face substantial financial barriers because healthcare costs are largely paid out-of-pocket, limiting access to timely diagnosis and optimal long-term treatment. These constraints may contribute to delayed diagnosis, disease progression, preventable complications, and poorer clinical outcomes.

Given the limited published experience from Nigeria and the need for additional data from resource-limited settings, this study aimed to describe the clinical characteristics, diagnostic findings, management approaches, and early outcomes of patients diagnosed with inflammatory bowel disease across selected tertiary gastroenterology centres in Southwest Nigeria. By documenting our multicentre experience, we hope to contribute to the growing body of evidence on IBD in sub-Saharan Africa and highlight areas requiring improvement in diagnosis, treatment, and future research.

2. Methods

2.1 Study Design and Setting

This was a retrospective, multicentre descriptive study conducted among patients diagnosed with inflammatory bowel disease (IBD) between January 2022 and December 2024 at selected public and private specialist gastroenterology centres within the Ondo-Ekiti Axis in Southwestern Nigeria. The participating public institutions included the Federal Medical Centre, Owo; Federal Teaching Hospital, Ido-Ekiti; University of Medical Sciences Teaching Hospital, Ondo City; and the University of Medical Sciences Teaching Hospital, Akure Complex, Ondo State. The participating private specialist centres included Deborah Hospital, New-Day Hospital, Citticare Specialist Hospital, and Union Diagnostic Centre, all located in Akure, Ondo State. The University of Medical

Sciences Teaching Hospital, Akure Complex served as the coordinating centre for the study.

2.2 Study Population

The study included the first ten consecutive adult patients diagnosed with IBD during the study period. Eligible patients were those with a confirmed diagnosis of ulcerative colitis (UC), Crohn's disease (CD), or indeterminate colitis based on compatible clinical presentation, colonoscopic findings, and histopathological examination. Only patients with complete medical records containing demographic information, clinical presentation, diagnostic investigations, treatment details, and follow-up information were included. Patients with incomplete medical records or whose final diagnosis was attributable to other causes of chronic colitis, including infectious colitis, amoebic colitis, intestinal tuberculosis, ischaemic colitis, radiation colitis, or colorectal malignancy, were excluded from the study.

2.3 Diagnostic Evaluation

All patients underwent a comprehensive clinical evaluation comprising detailed medical history, physical examination, laboratory investigations, lower gastrointestinal endoscopy (rectosigmoidoscopy and/or colonoscopy), and histopathological assessment of mucosal biopsy specimens. The diagnosis, anatomical extent, and disease severity of inflammatory bowel disease (IBD) was classified according to the Montreal Classification (Table 1) for Crohn's disease (CD) and ulcerative colitis (UC) [21, 22]. The diagnosis of Crohn's disease was established based on compatible clinical features supported by characteristic endoscopic and histopathological findings, including segmental bowel involvement, skip lesions, transmural inflammation, and granulomatous inflammation where present [21, 22]. The diagnosis of ulcerative colitis was based on a combination of compatible clinical presentation, continuous mucosal inflammation beginning in the rectum with variable proximal extension, characteristic colonoscopic findings, histopathological evidence of chronic colitis, and disease confined to the colon [21–23]. Patients whose clinical, endoscopic, and histopathological findings did not fulfil the diagnostic criteria for either UC or CD were classified as having indeterminate colitis (IBD-unclassified) [21–23]. Disease activity in patients with Crohn's disease was assessed using the Crohn's Disease Activity Index [21, 22].

2.3 Clinical Assessment

Clinical information extracted from patients' records included age at diagnosis, sex, duration of symptoms, presenting complaints, disease extent, laboratory findings, radiological investigations, endoscopic findings, histopathological diagnosis, treatment received, complications, relapse, and clinical outcome. Disease severity was assessed using the Montreal Classification for ulcerative colitis and the Crohn's Disease Activity Index (CDAI).

Ulcerative colitis severity was categorized as mild, moderate, or severe based on stool frequency, systemic manifestations, haemoglobin level, and erythrocyte sedimentation rate (ESR). Crohn's disease activity was evaluated using the CDAI, with scores <150 indicating remission and higher scores reflecting increasing disease activity.

2.4 Treatment and Follow-up

Treatment decisions were individualized according to disease severity, anatomical extent, presence of complications, patient fitness, and multidisciplinary clinical assessment. Medical followed standard protocols [1, 2]. Surgical intervention was reserved for selected patients with appropriate clinical indications, including extensive disease, complications, or inadequate response to medical therapy following specialist evaluation. Surgical procedures were undertaken after multidisciplinary discussion involving gastroenterologists and gastrointestinal surgeons, with individualized decision-making based on each patient's clinical condition.

Patients were followed up in specialist outpatient clinics following discharge. Follow-up assessments included evaluation of symptom resolution, disease relapse, treatment-related complications, and overall clinical outcome based on routine clinical practice.

2.5 Data Collection

Data were extracted retrospectively from hospital records using a standardized data collection form. Variables collected included demographic characteristics, presenting symptoms, laboratory investigations, radiological findings, colonoscopic findings, histopathological diagnosis, treatment modalities, complications, relapse, and follow-up outcomes.

2.6 Statistical Analysis

Data were entered into the Statistical Package for the Social Sciences (SPSS) version 24.0 (IBM Corp., Armonk, NY, USA) for analysis. Given the exploratory nature of this preliminary study and the small sample size, data were analysed using descriptive statistics only. Continuous variables are presented as median (range) or mean $\pm$ standard deviation where appropriate, while categorical variables are summarized as frequencies and percentages. No formal hypothesis testing or comparative statistical analyses were performed because the study was not designed or adequately powered to evaluate treatment effectiveness or establish causal associations.

2.7 Ethical Considerations

Ethical approval for the study was obtained from the Health Research Ethics Committee of the FUTA Teaching Hospital before commencement of data collection. The study complied with the principles of the Declaration of Helsinki. Because of the retrospective nature of the study, patient confidentiality was maintained by anonymizing all clinical data prior to analysis, and no patient-identifying information was included in the dataset or manuscript.

Table 1: Montreal Classification of Inflammatory Bowel Disease
A. Crohn's Disease Classification

Variable	Classification	Description
Age at diagnosis	A1	≤16 years
	A2	17–40 years
	A3	>40 years
Disease location	L1	Terminal ileum
	L2	Colon
	L3	Ileocolon
	L4	Upper gastrointestinal tract*
Disease behaviour	B1	Non-stricturing, non-penetrating
	B2	Stricturing
	B3	Penetrating
Perianal modifier	P	Perianal disease present

B. Ulcerative Colitis Classification

Variable	Classification	Description
Extent of disease	E1	Ulcerative proctitis (limited to the rectum)
	E2	Left-sided colitis (distal to the splenic flexure)
	E3	Extensive colitis (extends proximal to the splenic flexure/pancolitis)

C. Disease Severity (Ulcerative Colitis)

Severity	Clinical Criteria
S0	Clinical remission; no active symptoms
S1 (Mild)	≤4 stools/day, no systemic toxicity, normal ESR/CRP
S2 (Moderate)	>4 stools/day with minimal systemic features
S3 (Severe)	≥6 bloody stools/day plus one or more of: pulse >90 beats/min, temperature >37.5°C, haemoglobin <10.5 g/dL, ESR >30 mm/hour

Abbreviations: ESR = erythrocyte sedimentation rate; CRP = C-reactive protein.

3. Results

3.1 Patient Characteristics

Ten patients with inflammatory bowel disease (IBD) were managed across the participating gastroenterology centres between January 2022 and December 2024. There were eight males (80.0%) and two females (20.0%), giving a male-to-female ratio of 4:1. Patients ranged in age from 22 to 80 years, with a median age of 30.5 years. Six patients (60.0%) were aged 40 years or younger, while four (40.0%) were older than 40 years (Table 2). Based on the final clinicopathological diagnosis, ulcerative colitis was the commonest subtype, accounting for five patients (50.0%), followed by Crohn's disease in three patients (30.0%) and indeterminate (non-specific) colitis in two patients (20.0%) (Table 2). Most patients had attained at least primary education. Undergraduate students constituted the largest occupational group (50.0%), followed by civil servants (30.0%), while one patient each was a farmer, retiree, and housewife.

Table 2. Sociodemographic Characteristics and Diagnosis of Patients with Inflammatory Bowel Disease

Variable	Frequency (n=10)	Percentage (%)
Gender		
Male	8	80.0
Female	2	20.0
Age group (years)		
≤30	4	40.0
31–40	2	20.0
41–50	1	10.0
51–60	1	10.0
61–70	0	0.0
71–80	2	20.0
Diagnosis		
Ulcerative colitis	5	50.0
Crohn's disease	3	30.0
Indeterminate (non-specific) colitis	2	20.0

3.2 Clinical Presentation

The duration of symptoms before diagnosis ranged from one to twenty-five years, with a median duration of five years. Diarrhoea was the predominant presenting complaint. All patients with Crohn's disease presented with abdominal pain, non-bloody diarrhoea and fever, whereas all patients with ulcerative colitis had abdominal pain and most presented with bloody diarrhoea. Both patients with indeterminate colitis presented with fever, while bloody diarrhoea occurred in both patients and abdominal pain in one. Other clinical manifestations included weight loss, tenesmus, constipation and features of intestinal obstruction (Table 3).

According to the Montreal Classification, six patients (60.0%) presented with severe disease at diagnosis, while the remainder had mild-to-moderate disease activity.

Table 3. Clinical Presentation at Diagnosis According to Disease Type

Clinical Presentation	Ulcerative Colitis (n=5)	Crohn's Disease (n=3)	Indeterminate Colitis (n=2)
Abdominal pain	5 (100.0)	3 (100.0)	1 (50.0)
Bloody diarrhoea	2 (40.0)	0 (0.0)	2 (100.0)
Non-bloody diarrhoea	0 (0.0)	3 (100.0)	1 (50.0)
Fever	3 (60.0)	3 (100.0)	2 (100.0)
Perianal disease	1 (20.0)	0 (0.0)	0 (0.0)
Constipation	1 (20.0)	0 (0.0)	0 (0.0)
Weight loss/Tenesmus/Intestinal obstruction	1 (20.0)	3 (100.0)	0 (0.0)

3.3 Laboratory and Imaging Findings

Baseline laboratory investigations demonstrated packed cell volume (PCV) values ranging from 18% to 40%, with a median of 25%. Anaemia (PCV <30%) was present in six patients (60.0%). White blood cell and platelet counts were generally within normal reference ranges. Biochemical evaluation revealed hypokalaemia in six patients (60.0%) and hypoproteinaemia in three (30.0%). Stool microscopy identified *Entamoeba histolytica* cysts in one patient. However, subsequent clinical evaluation, colonoscopic examination, and histopathological assessment confirmed the diagnosis of inflammatory bowel disease after excluding infectious colitis. Radiological investigations were performed where clinically indicated. Five patients underwent barium enema examination, which demonstrated diffuse colonic wall thickening, narrowing

of the sigmoid colon, and tram-line appearances involving the descending and sigmoid colon. Four patients underwent contrast-enhanced computed tomography, which revealed diffuse thickening of the colonic and rectal walls, consistent with active inflammatory bowel disease (Table 4).

3.4 Colonoscopic and Histopathological Findings

All patients underwent lower gastrointestinal endoscopy with colonoscopy and mucosal biopsy. Colonoscopic examination demonstrated features consistent with chronic inflammatory bowel disease, including mucosal erythema, ulceration, contact bleeding, oedematous mucosa, granularity, loss of the normal vascular pattern, and loss of haustration. Extensive colonic involvement (pancolitis) was the predominant endoscopic pattern among patients with ulcerative colitis, whereas cobblestone mucosa and segmental disease were observed in patients with Crohn's disease. Histopathological examination of mucosal biopsy specimens confirmed chronic inflammatory bowel disease in all patients and correlated with the endoscopic findings, thereby supporting the final clinicopathological diagnosis in each case (Table 4).

3.5 Treatment and Clinical Outcomes

All patients received individualized medical therapy comprising aminosalicylates (sulphasalazine or mesalazine) and corticosteroids. Surgical intervention was undertaken following multidisciplinary assessment, with procedures including right hemicolectomy, extended right hemicolectomy and left hemicolectomy according to disease extent and clinical indication (Table 5). Assessment of clinical outcomes following therapy revealed (Table 6) that eight patients (80.0%) experienced satisfactory clinical recovery without major postoperative complications. Two patients (20.0%) developed disease relapse during follow-up and required further medical management. Two deaths occurred: one patient died from toxic megacolon despite intensive supportive treatment, while another died following progressive disease relapse. The remaining patients continued outpatient follow-up with satisfactory clinical progress.

Discussion

Inflammatory bowel disease (IBD) has traditionally been regarded as an uncommon disorder in sub-Saharan Africa, largely because of under-recognition, limited access to diagnostic facilities, and the high burden of infectious gastrointestinal diseases that frequently mimic its clinical presentation [1]. However, increasing awareness among clinicians, improved access to endoscopic services, and advances in histopathological diagnosis have resulted in a growing number of reported cases across Africa, suggesting that IBD is more prevalent than previously recognized [1, 11–20]. The present multicentre study contributes additional evidence that IBD is increasingly encountered in routine clinical practice in

Southwest Nigeria, although its true population burden remains uncertain.

In this cohort, ulcerative colitis was the most frequently diagnosed subtype of IBD, accounting for 50% of cases, followed by Crohn's disease (30%) and indeterminate colitis (20%). This pattern is broadly consistent with previous reports from Nigeria, Ghana, and South Africa, in which ulcerative colitis has remained the predominant form of IBD [1, 14–20, 23–35]. Although differences in disease distribution have been reported across studies, these variations likely reflect differences in sample size, referral patterns, diagnostic expertise, and access to specialist gastroenterology services rather than true epidemiological differences.

Most patients in the present study were young adults, with a median age of 30.5 years, which corresponds to the first peak in disease onset described in international epidemiological studies [1, 3–6]. Although a male predominance was observed, the small sample size precludes any meaningful conclusions regarding sex distribution. Larger population-based studies will be required to determine whether a true sex difference exists in the Nigerian population.

The predominant presenting symptoms were chronic diarrhoea, abdominal pain, rectal bleeding, weight loss, fever, and tenesmus. These findings are consistent with the established clinical manifestations of IBD reported in previous studies [2–6]. However, these symptoms overlap considerably with those of intestinal tuberculosis, amoebiasis, and other forms of infectious colitis that remain common in sub-Saharan Africa [24–35]. Consequently, delayed diagnosis is frequent, and clinicians should maintain a high index of suspicion in patients presenting with persistent diarrhoea or rectal bleeding, particularly when symptoms fail to respond to conventional antimicrobial therapy. Colonoscopy with mucosal biopsy remains the cornerstone of IBD diagnosis and was fundamental to establishing the diagnosis in all patients included in this study [36–45]. The close correlation between endoscopic findings and histopathological examination emphasizes the importance of combining both modalities to differentiate ulcerative colitis, Crohn's disease, and indeterminate colitis [46–53]. Unfortunately, access to endoscopy, gastrointestinal pathology services, and advanced imaging remains limited in many Nigerian healthcare facilities, contributing to delayed diagnosis and suboptimal patient care. Similar challenges have been reported throughout sub-Saharan Africa [13, 23, 32, 44, 45].

Conventional medical therapy with aminosalicylates and corticosteroids formed the mainstay of treatment in this series and was associated with symptomatic improvement in most patients. These findings reflect current practice in many resource-limited settings, where access to immunomodulatory agents and biologic therapies remains restricted by cost and limited availability [54–60]. Although biologic agents such as

infliximab have substantially improved outcomes in patients with moderate-to-severe IBD in high-income countries, [58–69] their use remains limited in Nigeria because of financial constraints and inconsistent availability. Consequently, treatment strategies often require adaptation to locally available resources while maintaining established principles of patient care.

Surgical intervention was undertaken following multidisciplinary clinical assessment and individualized decision-making based on disease extent, severity, response to medical therapy, and the presence of disease-related complications [46, 60–67]. The surgical approaches adopted in this cohort should therefore be interpreted within the context of the clinical circumstances of the individual patients and the realities of healthcare delivery in a resource-limited environment. Our findings should not be interpreted as supporting routine surgical management of IBD or as evidence that surgery is superior to optimized medical therapy. Rather, they reflect the management decisions made for this small cohort of patients within the constraints of available expertise, treatment options, and healthcare resources.

Most patients experienced satisfactory short-term clinical improvement following individualized management, although two patients developed severe complications resulting in death, including one patient with toxic megacolon. These adverse outcomes highlight the potentially life-threatening nature of IBD when diagnosis is delayed or advanced therapeutic options are unavailable. They also underscore the need for earlier recognition of the disease, timely referral to specialist centres, and improved access to comprehensive multidisciplinary care.

The present study also highlights several important challenges affecting IBD management in Nigeria. These include delayed presentation, limited availability of colonoscopy and histopathology services, inadequate access to advanced imaging, restricted availability of biologic therapies, and the substantial financial burden associated with long-term disease management. Because healthcare expenditure in Nigeria remains predominantly out-of-pocket, these factors may adversely affect access to specialist care, treatment adherence, and long-term clinical outcomes. Addressing these barriers will require increased investment in endoscopic services, specialist training, gastrointestinal pathology, improved health insurance coverage, and equitable access to essential medicines.

This study has several strengths. It represents one of the few contemporary multicentre reports describing inflammatory bowel disease in Southwest Nigeria and provides valuable preliminary data from a region where published evidence remains limited. Nevertheless, several limitations should be acknowledged. The retrospective design, small sample size, relatively short follow-up period, and absence of standardized disease activity measurements limited the ability to evaluate

long-term outcomes or compare treatment strategies. Consequently, the findings should be interpreted as preliminary observations rather than definitive evidence regarding disease epidemiology or treatment effectiveness.

Overall, this study contributes to the growing body of evidence that inflammatory bowel disease is increasingly recognized in Nigeria. Future prospective multicentre studies with larger sample sizes, standardized disease activity assessment, longer follow-up, and establishment of a national IBD registry are required to improve understanding of disease epidemiology, optimize management strategies, and enhance patient outcomes in resource-limited settings

Table 4. Clinical, Colonoscopic and Histopathological Findings of Patients with Inflammatory Bowel Disease

Patient ID	Bowel Segment Involved	Major Colonoscopic Findings	Histopathological Diagnosis
MA	Entire colon, rectum and anal canal	Loss of vascular pattern, ulceration, pancolitis	Ulcerative colitis
AA	Ileum and entire colon	Erythema, contact bleeding, ulceration, pancolitis	Ulcerative colitis
PK	Transverse, descending and sigmoid colon; rectum	Hyperaemia, loss of vascular pattern	Indeterminate colitis (IBD-U)
MO	Ileum, entire colon and rectum	Contact bleeding, oedematous mucosa, granularity, pancolitis	Crohn's disease
BE	Transverse, descending and sigmoid colon	Hyperaemia, granularity, mucosal spasticity, oedematous mucosa	Crohn's disease
OO	Descending and sigmoid colon; rectum	Multiple polyps, oedematous mucosa, loss of haustration, hyperaemia	Crohn's disease
ZM	Descending and sigmoid colon; rectum	Loss of mucosal folds, cobblestone appearance, ulceration	Ulcerative colitis
GB	Entire colon	Hypergranularity, hyperaemia, ulceration, contact bleeding	Indeterminate colitis (IBD-U)
MP	Entire colon	Hyperaemia, ulceration, contact bleeding, loss of mucosal folds	Ulcerative colitis
KO	Entire colon	Loss of vascular pattern, ulceration, granularity, pancolitis	Ulcerative colitis

Conclusion

This preliminary multicentre study demonstrates that inflammatory bowel disease (IBD) is increasingly recognized in Southwest Nigeria, although it remains relatively uncommon and is frequently diagnosed after a prolonged duration of symptoms. Ulcerative colitis was the predominant disease subtype in this cohort, while chronic diarrhoea, abdominal pain, and bloody or mucoid stools were the most common presenting features. Colonoscopy with mucosal biopsy was central to establishing the diagnosis, underscoring the importance of endoscopic and histopathological evaluation in patients with suspected IBD.

The diagnosis and management of IBD in resource-limited settings continue to be constrained by delayed presentation, limited access to specialist diagnostic services, the high cost of treatment, and restricted availability of advanced therapies. Although individualized medical and surgical management resulted in favourable short-term outcomes in most patients, the small sample size and retrospective design preclude definitive conclusions regarding treatment effectiveness.

Greater clinical awareness, timely referral for specialist evaluation, improved access to diagnostic facilities, and larger prospective multicentre studies are required to better define the epidemiology, optimize management strategies, and improve long-term outcomes of patients with IBD in Nigeria.

Table 5. Medical and Surgical Management of Patients with Inflammatory Bowel Disease

Patient ID	Medical Treatment	Surgical Procedure
MA	Sulphasalazine, mesalazine, corticosteroids	Extended right hemicolectomy
AA	Sulphasalazine, mesalazine, corticosteroids	Right hemicolectomy
PK	Sulphasalazine, mesalazine, corticosteroids	Left hemicolectomy
MO	Sulphasalazine, mesalazine, corticosteroids	Extended right hemicolectomy
BE	Sulphasalazine, mesalazine, corticosteroids	Left hemicolectomy
OO	Mesalazine, corticosteroids	Left hemicolectomy
ZM	Sulphasalazine, mesalazine, corticosteroids	Left hemicolectomy
GB	Sulphasalazine, mesalazine, corticosteroids	Extended right hemicolectomy
MP	Sulphasalazine, mesalazine, corticosteroids	Extended right hemicolectomy
KO	Sulphasalazine, mesalazine, corticosteroids	Extended right hemicolectomy

Study Limitations

The findings of this study should be interpreted in the context of several important limitations. First, this was a retrospective descriptive study involving only ten patients, which limits the generalizability of the findings to the broader Nigerian population. The relatively small sample size also precluded meaningful comparative statistical analyses and prevented robust evaluation of treatment effectiveness across different therapeutic approaches.

In addition, the duration of follow-up varied among patients, making it difficult to comprehensively assess long-term disease progression, recurrence rates, and survival outcomes. Disease activity indices and post-treatment endoscopic reassessments were not consistently available for all patients, thereby limiting objective evaluation of treatment response and mucosal healing. Furthermore, advanced diagnostic modalities such as magnetic resonance enterography, as well as routine access to biologic therapies, were not readily available during the study period, reflecting the resource constraints within the healthcare setting and potentially influencing diagnostic accuracy and treatment outcomes.

Finally, as this was a hospital-based study, the findings may not accurately represent the true epidemiology, disease spectrum, or healthcare experiences of patients with inflammatory bowel disease across the general Nigerian population. These limitations should be considered when interpreting the results and underscore the need for larger, prospective, multicentre studies to provide more comprehensive and generalizable evidence.

Table 6. Clinical Outcomes Following Individualized Management of Patients with Inflammatory Bowel Disease

Outcome	Frequency (n=10)	Percentage (%)
Clinical improvement during follow-up	8	80.0
Disease relapse	2	20.0
Major postoperative complications	0	0.0
Toxic megacolon	1	10.0
Mortality	2	20.0
Patients with satisfactory recovery at last follow-up	8	80.0

Recommendations

The findings of this study highlight several important priorities for improving the diagnosis, management, and understanding of

inflammatory bowel disease (IBD) in Nigeria. There is a need for larger prospective multicentre studies to better define the epidemiology, clinical characteristics, disease patterns, and long-term outcomes of IBD across different regions of the country. Establishing a national IBD registry would provide a valuable platform for disease surveillance, facilitate collaborative research, and generate robust data to inform evidence-based healthcare planning and policy development.

Improving healthcare infrastructure is equally important. Increased investment in endoscopy services, gastrointestinal pathology, and specialist training is essential to enhance the timely and accurate diagnosis of IBD. Furthermore, expanding access to advanced therapeutic options, including biologic agents where clinically indicated, has the potential to improve disease control, reduce complications, and enhance overall patient outcomes.

From a clinical perspective, healthcare providers should maintain a high index of suspicion for IBD in patients presenting with persistent diarrhoea, rectal bleeding, abdominal pain, and unexplained weight loss, particularly after common infectious causes have been excluded. Early recognition and prompt referral for appropriate diagnostic evaluation may reduce delays in diagnosis and improve prognosis. Finally, further research is needed to evaluate treatment outcomes, health-related quality of life, and the economic burden of IBD in resource-limited settings, thereby providing evidence to guide cost-effective management strategies and healthcare resource allocation.

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Availability of data and materials

Data generated and analysed during the course of this study are available from the corresponding author on request.

Ethics Considerations

Institutional Ethical Approval was obtained. Confidentiality was ensured by not writing the names of patients on proforma by the Helsinki declaration. A copy of the written

Authors' Contributions

BJA conceptualised the study, while BJA, KCO, AAE, IAK, NAO, OSO, KFO, AAO and GI were involved in design, data curation, formal analysis and manuscript drafting. All authors read and approved the final manuscript.

Competing interests

All authors of this paper declare that there is no conflict of interest related to the content of this manuscript.

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