Inflammatory bowel disease – an overview of a chronic condition

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Introduction
Nurses caring for patients with IBD in any setting, need to have a basic knowledge of this long – term condition, know the difference between Crohn’s disease and ulcerative colitis, and appreciate how it affects the patient’s quality of life, in order to be able to provide effective evidence based care for this cohort of patients.

Awareness of the key diagnostic strategies and of the main medical and surgical options available in the management of IBD is recommended.

What is IBD?
Inflammatory Bowel Disease (IBD) is an umbrella term given to the life-long chronic conditions known as Crohn’s disease (CD) and Ulcerative Colitis (UC). The causes of IBD remain unknown but it is recognised as an immune-mediated disease, possibly precipitated by genetic and environmental factors which may include smoking, drugs (such as anti-inflammatories, antibiotics or the contraceptive pill), childhood hygiene and microbial exposures.

It is most prevalent in adolescence or young adulthood with a peak age occurrence of 20 to 30 years for CD and 30 to 40 years for UC. In Europe the incidence rates varies from 11.8/100,000 for UC and 7.0/100,000 for CD in Northern Europe to 8.7/100,000 for UC and 3.9/100,000 for CD in Southern Europe. The highest incidence rates of CD and UC have been reported in Ireland, the United Kingdom, Northern Europe and North America

IBD is unpredictable and characterised by exacerbations and remission. Exacerbations are referred to as relapse or ‘flare-up’ when the disease is active.

Remission is defined as complete resolution of symptoms and mucosal healing verified on endoscopy.

Ulcerative Colitis
UC is confined to the rectum and colon. Originating in the rectum (proctitis), it can extend proximally to the sigmoid and descending colon (left-sided colitis), or the entire colon (pan, or extensive colitis). The inflammation is continuous and limited to the mucosa.

Symptoms include rectal bleeding and passage of mucus and faecal urgency leading sometimes to incontinence. The location and severity of disease activity determines the choice of therapy.

The main complication of UC is the development of toxic megacolon, when inflammation extends into the muscularis causing the colon to dilate with the possibility of perforation and the patient may require a colectomy.
Crohn's Disease
CD affects the gastrointestinal (GI) tract anywhere between mouth and anus. The inflammation is intermittent, with patches of disease activity (skip lesions) between areas of healthy mucosa. It occurs most commonly in the ileocaecal region, followed by the colon. It can be further characterised by disease location, confined to terminal ileum (terminal ileal), ileum and colon (ileo-colonic) and isolated to upper GI tract.

Symptoms vary according to disease location and include abdominal pain, diarrhoea, weight loss, anorexia and fever. Nausea and vomiting can occur if strictures cause intestinal obstruction. Starting initially as an inflammatory process, CD can progress to a stenosing/stricturing or penetrating/fistulising pattern, adding considerably to the burden of the disease. Fistulae, which are connections between bowel and skin (enterocutanous), bowel and bladder (enterovesical), or rectum and vagina (ectovaginal), commonly affect the perianal area.

Table 1: Ulcerative Colitis vs Crohn's disease: Similarities and differences

<table>
<thead>
<tr>
<th>ATTRIBUTE</th>
<th>ULCERATIVE COLITIS</th>
<th>CROHN'S DISEASE</th>
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<tbody>
<tr>
<td>Risk factors</td>
<td>Former smoking</td>
<td>Smoking, family history, geographical location, ethnicity</td>
</tr>
<tr>
<td>Age of onset</td>
<td>Two diagnosis peaks: 15-40 and 50-80</td>
<td>Usually before 30</td>
</tr>
<tr>
<td>Pattern of onset</td>
<td>Typically gradual</td>
<td>Gradual or sudden</td>
</tr>
<tr>
<td>Chronicity</td>
<td>Lifelong</td>
<td>Lifelong</td>
</tr>
</tbody>
</table>

Figure 1: a. Proctitis, b. Left-sided colitis c. Pancolitis

Symptoms vary according to disease location and include abdominal pain, diarrhoea, weight loss, anorexia and fever. Nausea and vomiting can occur if strictures cause intestinal obstruction.
Antibiotics: These fast-acting and potent anti-inflammatory drugs are a mainstay of treatment for acute flare-ups. Their side-effect profile makes long-term use or repeated short-term use unadvisable.

Aminosalicylates: These drugs, which contain 5-aminosalicylic acid (5-ASA), are effective for treating mild-to-moderate IBD flare-ups as well as maintaining remission. Recent evidence suggests they are more effective for UC than for CD.

Immunomodulators: These drugs decrease the inflammatory response by modifying the activity of the immune system. Immunomodulators are appropriate for patients who do not respond to 5-ASA or steroids, have steroid-dependent disease, or need to maintain remission.

Biologic drugs: Engineered through biotechnology methods and often isolated from natural sources (human, animal or microorganism), these drugs decrease inflammation by targeting specific molecular pathways that are abnormal in people with IBD.

Antibiotics: Antibiotics are effective in CD patients with bacterial infections, abscesses and fistulas (abnormal channels between sections of intestine or between the intestine and another part of the body). Some researchers also believe antibiotics can help control IBD symptoms by reducing intestinal bacteria.

Nursing role
Providing support and advice is paramount if patients are to be enabled to feel empowered to make decisions about their treatment and care based on current evidence.

Nursing involves advocacy for all patients and is of the utmost importance to patients with IBD due to the complex, uncertain and chronic nature of the condition. Advocacy for IBD patients includes identifying their needs and ensuring appropriate access to specialist care.

In any chronic illness where the individual will have an ongoing relationship with health care professionals, communication is an important factor in building rapport and trust. Nursing attributes most valued by patients are listening, interpersonal skills, and empathy.

Communication is a vital aspect of the nursing role, with verbal and non-verbal skills playing an important part in meeting the needs of the patient. IBD impacts significantly on patients’ lives and presents them with many uncertainties. The support, advice, compassion, caring and empathy they receive from nurses is considered highly important to their care.

Nurses caring for patients with IBD need an awareness of the extra-physical impact of the illness, of patients’ key concerns, and the effect of IBD on Health Related Quality of Life.

Establishing and maintaining an ongoing therapeutic nurse–patient relationship is essential. It can be used to encourage the patient to self-manage, to have an active, rather than a passive role in their care.

Individuals with IBD often find that their disease impacts on many aspects of daily life, affecting relationships, schooling,
socialising and work life. In a large European study undertaken in collaboration with patient associations, 74% of patients with IBD had taken time off work in the last year owing to their IBD and 40% reported that their IBD had prevented an intimate relationship.

Providing education to patients with IBD based on current evidence, individual needs, preferences and coping ability allows patients to become empowered and understand how to cope and live the best quality of life with a chronic condition.

Reliable printed information, leaflet, or web-based materials are recommended to supplement verbal information.  

Conclusion
Having an understanding of the background of IBD and an understanding of how this disease impacts on patients and their families lives can empower a nurse to deliver the most appropriate care to patients who are diagnosed with this chronic condition.

References

MCQs
Select the correct answer(s) to these questions.

Q1 The peak age occurrence for Crohn’s Disease is
   a. 10-15
   b. 20-30
   c. 30 – 40
   d. 40-50

Q2 Symptoms of Ulcerative Colitis include
   a. Rectal bleeding
   b. Passage of mucous
   c. Pain
   d. Constipation

Q3 Assessment of IBD involves
   a. Endoscopy
   b. Blood biochemistry and haematology
   c. CT/MRI
   d. All of the above

Q4 Surgery is necessary for Crohn’s Disease in
   a. 40% of patients
   b. 50% of patients
   c. 70% of patients
   d. 80% of patients

Q5 Drug treatments for IBD may include
   a. Biologics
   b. Anti-diarrhoeal agents
   c. Corticosteroids
   d. Anti-emetics

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