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Management of bowel dysfunction: evacuation difficulties

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Aims and intended learning outcomes

Many patients with bowel dysfunction do not present with a classic pattern of symptoms. There has been a lot of interest in manual evacuation in the past five years and the evidence base of the practice continues to be debated. After reading this article you should be able to:

- Feel confident in asking more in-depth questions about patients' coping mechanisms, as understanding the patient's perception of the problem is essential when trying to effect a change in bowel habits.
- Recognise the need for an evidence-based care pathway to establish constipation and implement best management, both short and long-term.
- Identify training needs in manual evacuation and digital rectal examination.

Introduction

Bowel dysfunction encompasses many problems, ranging from chronic constipation to irritable bowel syndrome (IBS), with or without faecal incontinence (FI). Management of these problems is influenced by many factors, including tradition, culture and people's expectations of 'what is normal'. But how do we know what normal bowel habits are, as timing of bowel habits can vary from two or three times daily to twice weekly or less? Many health issues are discussed openly, however, bowel problems remain a taboo subject. Prevalence of bowel dysfunction is difficult to measure, as embarrassment leads to under-reporting and sufferers have few guidelines on when to seek help.

Faecal incontinence

Faecal incontinence (FI) is defined as involuntary or inappropriate passing of liquid or solid stool (RCP 1995) and can also include the incontinence of flatus (Cook and Mortensen 1998). Leakage of mucus associated with IBS is also a problem.

FI was highlighted in the recent document *Good Practice in Continence Services* (DoH 2000). It estimates the prevalence of FI as 1 per cent of adults living at home, with 17 per cent of the older population reporting symptoms. Prevalence increases to 25 per cent in institutional care, and those with long-term physical disabilities, neurological conditions and learning disabilities are more likely to encounter problems. The prevalence of FI in children ranges from one in 30 of those aged four to five years to one in 100 of those aged 11 to 12 years. It is now recognised that anal sphincter damage after childbirth is a significant factor of FI in women. Sultan *et al* (1993) highlighted that one third of women having a first vaginal delivery might sustain some degree of anal sphincter damage, along with over 80 per cent of those having a forceps-assisted delivery.

Constipation

The 'Rome' diagnostic criteria (Thompson *et al* 1992) define constipation as demonstrating two or more of the following symptoms:

- Straining for at least a quarter of the time.
- Lumpy/hard stool for at least a quarter of the time.
- A sensation of incomplete evacuation for at least a quarter of the time.

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in brief

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Summary

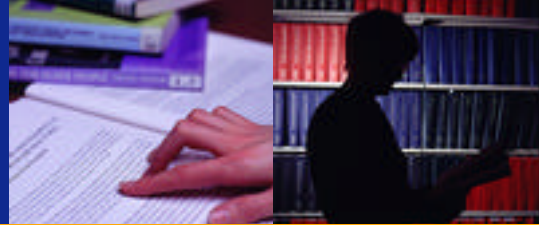
Bowel dysfunction affects many people and encompasses a variety of problems. This article examines the different forms of bowel dysfunction and considers the nurse's role in caring for patients with this disorder, including manual evacuation.

Keywords

- Health promotion
- Incontinence

These key words are based on the subject headings from the British Nursing Index. This article has been subject to double-blind review.

Bowel dysfunction



Box 1. Bowel care assessment pathway

- If the patient has any signs of undiagnosed bleeding, or black, tarry stool and is not taking ferrous sulphate, refer to doctor immediately
- Observe patient for signs of obstruction, such as vomiting and pain
- If patient is taking medication known to cause constipation, consider review with GP
- Record details of fluid intake amount and types
- Establish constipation using a signs and symptoms profile. (Considers stool frequency, consistency, pain/discomfort on defecation, the need to strain and impaction)
- Complete a bowel diary
- Use Bristol stool form chart to record stool consistency (Heaton 1999)
- Complete a food diary to establish fibre intake. Fibre supplement might be required
- If patient is in discomfort, consider abdominal massage
- Obtain patient's consent for any invasive procedure
- Establish follow-up procedure

Reprinted with permission of Valerie Bayliss, Continence Adviser, Loddon NHS Trust, Basingstoke. Developed from Bayliss *et al* (2000)

Box 2. Factors causing or influencing constipation

Diet	Low in fibre Low in fluid Low food intake
Anorectal pain	Haemorrhoids Anal fissures Perianal Crohn's disease
Reduced abdominal pressure	Positional Pelvic floor damage
Ignoring the need to stool	Inconvenience Immobility Neurological disease Psychiatric disorders
Underlying medical conditions	Irritable bowel syndrome Bowel/pelvic tumours Diabetes Hypothyroidism
Medication	Analgesics Antidepressants Iron supplements Anticholinergics Antihistamines Some antacids

(Winney 1998)

■ Two or fewer bowel movements a week. Fewer than 10 per cent of the population has a bowel action daily (Edwards 1997). It is estimated that 2-20 per cent of people eating a western diet experience constipation (Cook *et al* 1999). American studies estimated that 17 per cent of the adult population would be constipated at some point in their lives (Sonnenberg *et al* 1994). Preliminary data from a current study suggest that 50 per cent of pregnant women suffer constipation and 37.9 per cent still have the problem eight weeks postpartum (Chiarelli 2000).

The cost to the NHS has been estimated at £47 million, but that only accounts for the 11 million prescriptions written annually by GPs (Petticrew 1997). There is also the cost of district nurses' time in advising on and managing constipation. This was the subject of a recent RCN report, *The Nursing Cost of Constipation* (Poulton and Thomas 1999), and a national audit of management of chronic constipation is being planned by an advisory committee of continence advisers and district nurses. Results of a pilot audit were presented at the Association for Continence Advice (ACA) conference recently and it is hoped that national guidelines will be written to promote best practice in the field. It is important to obtain patient consent when performing such procedures as digital rectal examination and manual evacuation of faeces (Shepherd 2000).

Irritable bowel syndrome

Irritable bowel syndrome (IBS) is diagnosed by the following criteria (Thompson *et al* 1992) as at least three months continuous or recurrent abdominal pain that is either:

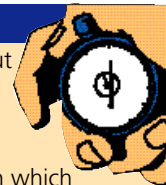
- Relieved by defecation, or
 - Associated with a change in stool frequency, or
 - Associated with a change in stool consistency.
- With two or more of the following at least a quarter of the time:
- Altered stool frequency (more than three times a day or less than three times a week).

- Altered stool form.
- Straining, urgency or tenesmus (feeling of incomplete emptying).
- Passage of mucus.
- Bloating or abdominal distension.

IBS is a problem for up to 25 per cent of the population at some time in their lives (Adams 1999). It also accounts for 40 per cent of new referrals to gastroenterology departments, yet as many as 60-70 per cent of sufferers might not visit their GPs. Again, the taboo nature of the subject discourages people from seeking help (Fisher 1997). As there is no known cause for IBS, there is no cure as such (Ness 1997). It takes a caring, understanding health professional to empower sufferers to gain more control over their symptoms. Health promotion activities should lead to a healthier lifestyle. Audit of patients attending a bowel dysfunction clinic show that there are many forms of conservative management that can help IBS sufferers (Powell 2000).

TIME OUT 1

Why do you think talking about bowel dysfunction is a taboo subject? What effect does this have on those with bowel problems? Think about ways in which you could encourage people to seek help and provide them with information.



Seeking help

Since the government began its drive to detect bowel cancer at its earliest stage, more people will have consulted their GP (NHSE 1997), but equally as many might be too frightened to do so for fear of the consequences. Many people assume that surgery will be the only answer to their problems, which might result in them having a colostomy.

If someone has a sudden change in bowel habit or any kind of rectal bleeding, he or she is encouraged to seek help. Patients are often referred to surgeons and will frequently be subjected to a barium enema and sigmoidoscopy or colonoscopy. If there is no apparent physiological cause for their symptoms, some of these patients will be referred to a continence adviser for help.

A bowel dysfunction clinic is one place where patients can obtain help and nurses can gain a valuable insight into how people feel about their bowel problems and coping mechanisms. However, patients can also get help and advice from any nurse who learns how to assess bowel problems sympathetically and who is able to offer a range of appropriate management options for the individual problem.

Community nurses are ideally placed to identify problems and initiate or refer for appropriate investigations and management (Chelvanayagam and Norton 1999). Assessing a patient's bowel problems is the first step in

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treatment. Box 1 shows an example of a bowel care pathway focusing on constipation. This provides a framework for nurses to assess bowel problems.

TIME OUT 2

Consider the factors that influence normal bowel habit. Make a list of the things that you think might cause constipation. What advice would you give to a patient with constipation?

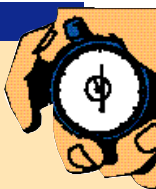


'Normal behaviour' can be difficult to measure in patients presenting with certain groups of symptoms. Constipation can be caused and influenced by many factors, including those listed in Box 2. A full assessment will look at dietary changes necessary to increase the patient's fibre and fluid intake. If the patient's appetite is poor, it might be unrealistic to expect a daily bowel action to produce a stool of an average weight of 100g, as described by Heaton (1999).

Unfortunately, childhood training might have conditioned many people to expect this; as a result, they might needlessly take laxatives on a regular basis (Edwards 1997). The case study illustrates how this practice can cause someone to become faecally incontinent (Box 3).

TIME OUT 3

Reflect on a patient with continence problems who you have cared for. What social and psychological problems did this cause for the patient?



Multidisciplinary support Psychosocial factors can influence the experience of constipation (Kamm and Lennard-Jones 1994) and further multidisciplinary support might be required if no underlying cause is apparent. More deep-rooted beliefs can be caused by incidences such as previous physical or sexual abuse. This can be a problem for the patient and also for the nurse if he or she does not have the necessary counselling skills to deal with the situation. However, patients with bowel problems, particularly FI, are often pleased to find an expert who will listen to their problems and give them practical advice.

Clinical psychotherapists with a special interest in bowel dysfunction usually only work in specialist centres and are not available to the wider community. However, working in a multidisciplinary team and sharing concerns can only lead to the development of a better service for sufferers.

The first stage is to be prepared to listen to patients. Encourage them with practical advice, reassure them that they are not alone and that you are not judging them. People with bowel dysfunction often need to devise elaborate coping mechanisms. The right questions

Box 3. Case study

A retired midwife, who was otherwise fit and well, was referred to the bowel clinic with bowel urgency, having experienced the occasional 'accident'. She had a busy social life and was afraid of being caught unawares in public. It transpired that she had relied on herbal laxatives for years to ensure that she had a regular daily bowel action. Her colon came to rely on this and she found she could no longer function

without laxatives. She also had a high-fibre diet, which made her stools bitty and she experienced a lot of bloating and griping. A weak pelvic floor musculature compounded the problem and intestinal hurry and bowel urgency led to loss of stool.

Rationale for treatment: Fibre intake was moderated, reducing intestinal hurry and bulking the stools, and pelvic floor exercises reduced bowel urgency, giving more control.

need to be asked to reach an understanding of the exact nature of the patient's problem. When patients stay on a caseload for a long time, it is important to ask obvious questions from time to time and never assume that these have already been asked.

TIME OUT 4

What problems do you think would specifically affect women around childbirth? What could you do to ease such problems and prevent them from developing into more long term problems?



Problems in women

Asking the right questions at the outset will save a lot of time. Nurses need to be proactive, for example, when questioning new mothers. You must ask about constipation as well as bowel urgency and incontinence after childbirth. Studies show that the incidence of these problems is higher at this time, but new mothers are reluctant to consider their health issues (Chiarelli 2000). As more women than men are at risk of bowel incontinence, because of obstetric damage, they should be given information so they can make informed decisions. Midwives, continence advisers, physiotherapists and health visitors need to work together to ensure those at risk or with problems are seen at the right time. Studies show that the optimum time for nerve and muscle recovery is up to 24 weeks postpartum (Fynes *et al* 1999). Care pathways should be developed so that the multidisciplinary team is aware of all options available to promote healthy bowel habits.

Stages of defecation

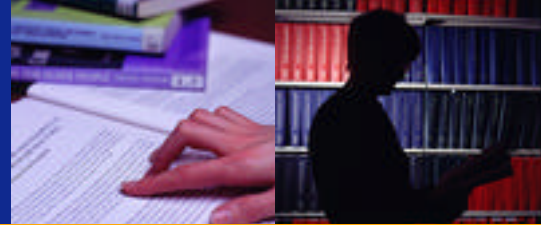
Normal defecation will only occur when abdominal pressure increases at the same time as the puborectalis muscle relaxes, thus allowing voluntary passage of stool. Box 4 lists the stages of normal defecation (Edwards 1997). Correct posture, bracing the abdomen and bulging to increase abdominal pressure all assist the passage of the stool from the sigmoid colon into the rectum.

Box 4. Stages of defecation

- Sitting comfortably
- Abdominal pressure rises
- Rectal pressure rises
- Relaxation of anal sphincters
- Internal anal sphincter pressure falls
- External anal sphincter pressure falls
- Rectal pressure is now higher than anal pressure
- Puborectalis muscle relaxes
- Pelvic floor descends
- Anorectal angle increases
- Defecation occurs

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Bowel dysfunction



Box 5. Protocol for manual evacuation of faeces

- Explain procedure to the patient
- Document verbal consent
- Ensure a private environment
- Place the patient in left lateral position with knees flexed
- Take the patient's pulse (to form a baseline to assess any change during the procedure)
- Put protective pad under patient
- Wash hands, put on disposable gloves and apron
- If the patient has had manual removal performed regularly, lubricate the finger with gel. If not, lubricate the finger and anus with lignocaine gel and allow two minutes for it to take effect
- Inform the patient that you are about to start
- Insert the gloved finger into the rectum slowly
- If stool is solid mass, push finger into the centre, split it and remove small sections until none remains. In scybala-type (hard) stool, remove a lump at a time
- Encourage patient to assist with Valsalva manoeuvre if possible. This is used to enhance bowel activity – it is the action of force against a closed epiglottis
- Place faecal matter in a receptacle as it is removed
- During the procedure, check the patient's heart rate and stop if it drops or changes
- When procedure is complete, wash and dry the patient's buttocks and anal area
- Remove gloves, check pulse and baseline measure
- Make the patient comfortable
- Remove apron; record findings (RCN 1995)

Edwards C (1997) Down, down and away! An overview of adult constipation and faecal incontinence. In Getliffe K, Dolman M (Eds) *Promoting Continence. A Clinical and Research Resource*. London, Bailliere Tindall.

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Accountability and professionalism

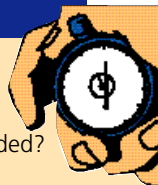
Nurses are encouraged to question their professional accountability. Although management and treatments remain conservative, as opposed to surgical procedures, nurses' practice can at times be quite invasive. For example, vaginal and rectal examinations raise the issue of patient consent.

Nurses should always question the need for such procedures. The new RCN guidelines on *Digital Rectal Examination and Manual Removal of Faeces* (RCN 2000) suggest that there is a place for formal teaching of these procedures, but it is at present considered outside the remit of undergraduate nurse education.

However, with the advent of specialist nurses, clinical nurse specialists and nurse consultants, nurses must demonstrate professionalism and evidence-based practice. A framework should be created for all nurse activities. Much of what nurses do is health promoting and should be the cost-effective option. This is a golden opportunity for us to work together with emerging primary care groups as they move towards primary care trusts. However, we must ensure regular service review, promote clinical governance strategies and monitor performance by clinical audit (DoH 2000).

TIME OUT 5

List the indications when you consider assisted evacuation would be acceptable. In what circumstances should it be avoided?



Assisted digital evacuation

It is acknowledged that a small percentage of patients rely on perineal support, digital stimulation or manual evacuation to assist routine bowel care. In a recent audit of bowel care (Powell 2000), 8 per cent of patients practised assisted digital evacuation.

Indications for assisted evacuation In the recently published RCN document (RCN 2000), the following indications are given:

- Faecal impaction.
- Incomplete defecation.
- Inability to defecate.
- If other bowel emptying techniques have failed.
- Neurogenic bowel dysfunction.
- In patients with spinal injury.

Caution/risk factors for assisted evacuation The following risk factors should be observed:

- Autonomic dysreflexia, which is unique to patients with spinal cord injury. The primary cause is a noxious stimulus that precipitates an abnormal response from the autonomic nervous system (Adist and Bishop 1995). Symptoms include palpitations, sweating, headache, flushing and severe hypertension.

Prevention is by primary nursing treatment and an appropriate bowel management programme.

- Rectal trauma, if the procedure is performed without care, knowledge or experience.
- Rectal bleeding.
- Recent radiotherapy.
- History of abuse.

The types of assisted evacuation are as follows.

Perineal support Support to the perineal body can aid defecation in some women. Perineal support is needed when conditions arising from posterior vaginal wall prolapse make emptying the rectum difficult. Many women find it helps either to support the perineum or the posterior vaginal wall to assist defecation (Govan *et al* 1993).

Digital stimulation There might be a need to stimulate the anus or anal sphincter to enable evacuation. This might follow an episode of constipation and then become an integral part of defecation. In spinal injured patients, if the lesion occurs above the *cauda equina* (upper motor neurone lesion), then it is usually possible to stimulate a defecation reflex voluntarily. Digital stimulation either with the insertion of suppositories or by gentle rotation of the gloved finger just inside the anus, stimulates the rectum to contract.

Manual evacuation There is very little written about this procedure, which is the digital removal of faecal matter. It is considered to be a nursing role (Addison 1996, Shepherd 2000). Caution has been expressed because of the risk of the procedure, in particular, stimulation of the vagus nerve in the rectal wall, which can slow the client's heart (Kozier *et al* 1998). Porter and Perry (1989) also discussed the risks of bowel perforation and rectal bleeding. The RCN guidance (2000) considered observations and risk factors of manual evacuation as an acute intervention compared to a regular intervention. Further risk factors included distress, pain and discomfort during the procedure.

There have been suggestions that manual evacuation is a well established and successful practice, particularly in spinal cord injured patients (Harrison and Thomas 2000). However, studies have identified a need for further research into long-term bowel management in general and manual evacuation (DeLooze *et al* 1998, Menter *et al* 1997). Box 5 gives a protocol for a nurse performing manual evacuation.

The majority of simple constipation is managed by a combination approach of diet, exercise, oral stimulant laxatives and/or faecal softeners. Constipation in a small percentage of patients is a mechanism of managing faecal incontinence, if the stool is kept firm it does not easily escape. Depending on the bowel assessment and stool consistency, suppositories and enemas might be administered. Newer treatments include laxatives, abdominal massage and the cardiomed catheter.



Manual evacuation can be a 'one off', but more commonly it is a long-term management in the presence of neurological dysfunction.

Historically, many patients have been taught manual evacuation as a means of managing their bowel continence. Manual evacuation is considered an established technique for the spinally injured flaccid bowel (Harrison and Thomas 2000). Watson (1997) suggests that digital stimulation alone is effective, along with techniques known to enhance defecation – warm drinks, position and promoting a reflex action.

When to use manual evacuation

Many patients, specifically those with spinal cord lesions, have used manual evacuation as their established and routine method of bowel management. However, there is currently a consensus of opinion that manual evacuation can be avoided (Addison 1995, Burke 1994, Correa and Rotter 2000, RCN 2000). Manual evacuation of faeces is seen as a last resort for cases where all other methods of bowel evacuation have failed. Fader (1997) suggests that in neurologically impaired patients, manual evacuation, performed gently by trained staff, might be the only viable method of evacuating the bowel.

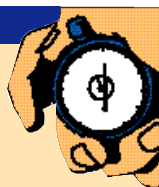
Lower motor neurone bowel Patients with spinal injuries at level L1 and below, for example in spina bifida, have a flaccid bowel, and the ability to grunt and strain, but not empty. The sigmoid colon, rectum and anus are flaccid and do not contract. Removal of faeces is therefore achieved by a combination of abdominal pressure (straining) and digital evacuation.

Upper motor neurone bowel Spinal injuries above T12 level often leave the patient with a reflex bowel action needing minimal intervention. The bowel still has some or all reflexes and when the rectum is stimulated it will contract. A full rectum might be enough to stimulate the bowel, but the use of aperients and/or digital stimulation might also be necessary.

Training There are recognised training needs that should be addressed by practitioners when carrying out manual evacuation; the majority of nurses receive little or no training. While recognising a 'duty of care' (UKCC 1992) to patients, nurses are also expected to 'acknowledge any limitations in your knowledge and competence and decline any duties or responsibilities unless able to perform them in a safe and skilled manner'. Action to remedy deficits in knowledge should be taken.

TIME OUT 6

What specific knowledge does a nurse require to be able to carry out manual evacuation of faeces?



The practitioner should have:


- Knowledge of the anatomy and physiology of the lower rectum in relation to the normal bowel.
- Awareness of common perineal and anal conditions.
- Ability to discuss constipation management options.
- Knowledge of stool type and the ability to identify the stool type by palpation of the rectum.
- Critical synthesis of evidence-based practice and relevant literature.
- Professional accountability.

Patients and families place their trust in healthcare professionals and they need to be assured that the treatments provided are up to date, effective and are provided by people whose skills have kept pace with new thinking and techniques.

Conclusion

Identification of the problem is only the first step in the continence assessment process and does not necessarily lead to a diagnosis or recommended treatment (Silverman *et al* 1997). Many social, cultural, environmental and medical factors complicate the assessment process and care should reflect appropriate management strategies. Bowel dysfunction is common and its management is integral to nursing care. There is a need for nurses in all areas to listen to patients, ask the right questions and help manage distressing symptoms.

Evacuation difficulties are not uncommon, but with simple intervention, the patient's quality of life can be improved significantly. Faecal incontinence can often be the last straw in home care and can be one of the main reasons leading to institutionalised care.

Conservative management options offer practical workable solutions to what can often be years of poor habit. The bowel care assessment pathway (Box 1) offers a welcome start and gives the practitioner an evidence-based care plan. Nurses have to ensure that their practice remains patient focused and research based. The new RCN guidance on digital rectal examination and manual evacuation raises many important issues, particularly training. It might leave nurses asking if indeed they ever received formal training and what the implications are for their own practice .

TIME OUT 7

Now that you have completed the article, you might like to think about writing a practice profile. Guidelines to help you write and submit a profile are outlined on page 53.



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