Using a clinical decision-making support tool to enhance practice

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As nursing practice expands nurses need easy access to reliable cohesive guidance. PRODIGY is a support tool for clinical decision-making which is approved by the Department of Health. It is a learning resource that provides information on about 170 illnesses and covers condition management, prescribing options and patient information leaflets. This article uses a fictional case study to illustrate how nurses can make use of PRODIGY guidance to provide holistic, patient-centred care.

What is PRODIGY?

PRODIGY is a clinical decision-making support tool and learning resource that was originally commissioned by the Department of Health to assist GPs. It provides advice on over 170 conditions.

As nurses take over in clinical areas that were traditionally the responsibility of doctors they need access to comparable support and information (DoH, 2001). The PRODIGY website (www.prodigy.nhs.uk) has been modified to ensure it addresses the needs of all nurses, including those who have extended their skills, such as practice nurses, nurse practitioners and nurse prescribers.

Many nurses will find PRODIGY guidance useful to their working life and/or their professional development. The guidance is also particularly useful as a framework for protocols or patient group directives.

PRODIGY guidance is available in three formats: website, clinical support system and print, and it covers the following areas:

- Identifying conditions;
- Managing conditions;
- Epidemiological information;
- Treatment options;
- Prescription options;
- Referral and/or investigation options;
- Patient-practitioner discussion issues and information on self-management.

PRODIGY also provides patient information leaflets (PILs) to accompany the guidance. All guidance is based on best evidence from the National Institute for Clinical Excellence and other educational bodies.

Guidance

Guidance takes place in the form of scenarios. These are designed to reflect the type of consultation situation a practitioner may face such as ‘treatment failure’ or ‘pregnancy’. The guidance is designed to assist the practitioner to conduct a methodical, thorough consultation. Each guide is fully referenced.

Quick reference guides

Quick reference guides are also available. It is envisaged that these will be undertaken for all of the conditions currently cited in the Extended Nurse Prescribing Formulary. They are designed to be used as a desktop resource providing a synopsis of the full guidance, including medication options. Items that nurses can prescribe are highlighted by a large ‘N’ symbol.

PRODIGY also uses ‘shared screens’ in the computer system and ‘discussion points’ in the web guidance. These areas are designed to encourage interaction between the practitioner and the patient. Treatment options and practical aspects of care can be discussed in these forums and this encourages patient-centred consultations (DoH, 2004a).

Patients are becoming partners in their own care and are being encouraged to participate in changes within the health service. With the advent of the expert patient (DoH, 2001) and patient satisfaction surveys in the new general medical services contract (DoH, 2004b) comes the reality of improved patient knowledge and increased expectations. PRODIGY recognises the importance of providing guidance that helps to facilitate this new ethos.

Case study

The patient, Gail Smith, is aged 20. She has no medical history of note; she is not currently taking any medication, she has no allergies and is not pregnant. She presents at the surgery with what she thinks may be a case

LEARNING OBJECTIVES

- Locate the PRODIGY website on the internet
- Identify the benefits of using a clinical decision-making tool
- Understand how you can use PRODIGY with your patients
- Consider how the patient information leaflets could inform your consultations
of genital thrush. She has a vulval itch and swelling, accompanied by a creamy white odourless discharge. Her symptoms started three days ago and she has not had any treatment. This is the first time that she has experienced this problem. This is covered in the PRODIGY guidance under: Candida, female, genital (PRODIGY, 2004).

What is it?
This section provides details and usually includes epidemiological information such as:
- Thrush is caused by an imbalance of yeasts;
- Candida albicans accounts for 90 per cent of infections;
- Candida is a normal flora that is reacting to changes in its environment.

How common is it?
Candida affects about 75 per cent of women. About 10 to 20 per cent of women may have candida but are asymptomatic. About 40 to 50 per cent of women will experience more than one episode of infection.

How do I know that my patient has it?
Making a correct diagnosis in any condition can be difficult. Collecting a detailed patient history – which includes medical problems, medication, sexual history, allergies, symptoms and examination where appropriate – is essential. PRODIGY is not designed to replace validated diagnostic training, but it can help to clarify a diagnosis.

In genital thrush the most common features are white discharge, vulval erythema and a normal pH level (4 to 4.5). A raised pH may signify other pathology. A culture swab is unnecessary in the following situations:
- Where the diagnosis appears definitive;
- Where it is a one-off episode;
- Where no other pathology is suspected.

What else might it be?
- Acute pruritus vulvae, herpes simplex, psoriasis;
- Vaginal discharge – bacterial vaginosis, trichomoniasis;
- It is important to consider other possible diagnoses when the symptoms are unclear, where the patient gives a poor history, or has recently had more than one sexual partner. Ms Smith has only one regular sexual partner, who she is sure has an exclusive relationship with her.

PRODIGY scenarios
Where appropriate PRODIGY guidance offers different scenario options. This allows the practitioner to immediately focus on the situation that is most appropriate to the patient. As this is a new problem for the patient, the ‘single event’ scenario is the most appropriate choice. Other scenarios included are:
- Treatment failure;
- Recurrent event.

Precipitating factors
This section discusses actions, medical history or medications that may predispose the patient to thrush, such as:
- Recent antibiotic therapy;
- Wearing tight clothing around the affected area;
- History of diabetes;
- Pregnancy.

Ms Smith’s symptoms began while she was taking antibiotics for a chest infection. I discuss the importance of wearing loose clothing on the lower body and advise Ms Smith that it may have been the antibiotic therapy that triggered the episode of thrush. Ms Smith asks if her boyfriend needs to be treated. He is asymptomatic. Partners who are asymptomatic do not need treatment.

Refer or investigate?
Referral and investigation are unnecessary at this time. Where there is a suspicion of a resistant organism, if treatment failed, a swab should be taken for culture. It may be necessary to refer the patient to her GP or a genitourinary medicine clinic if she has repeated episodes of thrush. After reviewing the patient history, I feel safe in concluding that Ms Smith has thrush.

Management of thrush
This section details the type, duration and efficacy of available treatments. Antifungal treatments, topical and oral, are recommended.

Many of these treatments can be purchased over the counter (OTC) and are generally cheaper than a prescription charge. Azole antifungal agents provide an 80 to 95 per cent cure rate. Nystatin provides a 70 to 90 per cent cure rate.

Topical treatment is effective and quick. When considering prescribing intravaginal products make sure that the patient is comfortable using such products and understands the correct way to apply them.

There can be a 12-hour to 24-hour delay before oral treatment takes effect. This delay may be unacceptable to many patients who are suffering acute discomfort. However, some patients may prefer to take tablets rather than apply creams.

It is important to realise that 10 per cent of women may suffer systemic effects from their treatment, such as
gastrointestinal intolerance, headache and rash. These symptoms are usually short-lived. There is no conclusive evidence on the use of yoghurt in treating thrush.

**Management of a single event**

This section provides a brief synopsis of treatment information and advice. Topical and oral azoles are effective in short courses. A short course can be defined as either a single dose of medication or three to seven days of treatment. Where treatment regimens are shorter, the dosages become higher. It is generally acknowledged that dosage is more important than the duration of treatment.

**Discussion points**

Patient concordance is important for treatment to be effective. Ms Smith chooses a topical cream. She does not feel comfortable using intravaginal products and decides a quick resolution to the problem is her priority.

The guidance notes the following:

- Cream gives instant relief;
- Oral products can take up to 24 hours to be effective;
- It may be cheaper to buy the treatment at a pharmacy if the patient has to pay for prescriptions;
- The patient should be advised how and when to apply the cream.

It is vital the patient is comfortable with the treatment and options should be discussed before a prescription is generated. Expected outcomes and the duration of treatment should be fully explored. It is also important patients have realistic expectations so that confidence in the treatment and/or the practitioner is maintained.

Giving a patient verbal advice about medications that can be bought OTC is still considered to be a form of prescribing and documentation should reflect verbal advice as stringently as if a prescription has been issued.

**Type of treatment**

Several prescribing options are offered in the guidance. All prescriptions detail duration of treatment, application regimens, cost and amount of treatment required. Prescribing options are based on effectiveness, best evidence and cost. Other considerations include concordance, side-effects and treatment duration.

I note that the OTC cost for clotrimazole one per cent cream is much cheaper than a prescription charge. As the patient pays for her prescriptions, I advise her to purchase her topical cream from a pharmacy. The treatment advice states that the cream may damage condoms. Ms Smith uses condoms for contraception so I advise her of the potential risk of contraceptive failure.

**Patient information leaflets (PILs)**

These are available for each guidance and discuss the condition and self-management issues that the patient should be aware of. All PILs are easy to understand.

Information available in PILs for this guidance includes:

- A definition of thrush;
- Antifungal medicine;
- Thrush – vaginal;
- Details on symptoms, prevalence and why thrush occurs;
- How to prevent thrush recurring;
- Treatment options;
- What to do in the event of treatment failure.

Holistic remedies are also discussed. In the case of candida, evidence shows that the efficacy of using natural yoghurt, vinegar or bicarbonate baths to heal thrush is inconclusive, but acknowledges that these remedies may be soothing.

**Review**

As this is the patient’s first recorded episode of thrush I advise her that if she has further symptoms or if symptoms do not resolve then she must make an appointment with either myself, the GP or a genitourinary medicine clinic (self-referral).

**Conclusion**

PRODIGY highlights issues that need to be addressed during a consultation. It provides knowledge and support for both patients and practitioners in an easily accessible, succinct manner.

Concordance is a major feature of the guidance and the discussion areas help the practitioner to identify situations where patients need advice about the management of their conditions. All verbal information can be corroborated by written information and all guidance is referenced.

Nurses can and should use PRODIGY guidance as a resource to enhance both their personal and professional practice. As well as providing an objective knowledge base, it is free.

The guidance for ‘candida – female genital’ is currently being updated and information included in this article may differ slightly from the updated version. PRODIGY welcomes suggestions from its users. If you would like to make a comment or suggestion about the website or the guidance, please contact: enquiries@schin.co.uk

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**GUIDED REFLECTION**

Each week *Nursing Times* publishes a guided reflection article to help you with your CPD. After reading the article use the following points to help you write your reflection:

- Detail why you were interested in this article;
- Outline the last time the PRODIGY guidelines would have been useful in your practice;
- List the important points highlighted by the article;
- Write about how you could use the PRODIGY guidelines in your practice;
- Summarise what you have learnt from the article and the benefits to your practice.