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Patients as Partners



CHRONIC KIDNEY DISEASE – PROMOTING SELF-MANAGEMENT

This article will discuss the evidence for the self-management of long-term conditions, with a focus on chronic kidney disease (CKD). Self-management of CKD can include activities to control and manage blood pressure (BP); changes to diet such as reduced salt intake; smoking cessation; and understanding of the action and side-effects of prescribed medicines.

Self-management education programmes have resulted in small to moderate effects for selected chronic diseases.¹ For people with diabetes, a variety of reviews have concluded that, at least in the short to medium term, self-management support is effective.² A systematic review of self-management programmes¹ found small but significant reductions in glycosylated haemoglobin levels (HbA_{1c}) and improvements in systolic BP.

Unfortunately, there has been little research on the effects of self-management techniques in people with CKD. However, because CKD is a chronic illness there is much scope for nurses to help people to have active involvement in their care. This active involvement is encouraged in renal units, so if people have progressive CKD and eventually require renal referral it is helpful if they have become used to this approach as soon as they are first diagnosed.

One study in the United States³ examined the self-management experiences of people with mild to moderate

CKD (stages 1-3). It found that people with early kidney disease had a number of needs, including help with realising that CKD is a long-term condition that cannot be cured and a need for information on the condition itself. They also needed information on how to correctly self-administer their medicines, help with dietary and fluid allowances, and learning to report relevant symptoms to healthcare providers.

WHAT TO TELL PATIENTS – THE DIAGNOSIS

When a person is first diagnosed with CKD stages 3-5, it may be useful to explain that:

Decline in kidney function is part of the normal ageing process

CKD is the name used to describe any permanent loss of kidney function, but kidney function declines naturally with age. For every year over the age of 40, it is possible that an individual can lose 1% of kidney function. Therefore, by the age of 80, some people may only have 60% function remaining. However, this does not mean that someone would necessarily suffer from health problems. Many people are able to live healthy lives even when their kidney function is reduced to as low as 30%.

If reduced kidney function is stable, it is unlikely to get much worse over time

Most people with stage 3 CKD have stable kidney function which, with recommended lifestyle changes, is unlikely to get worse. However, a minority of people with CKD will see a slow deterioration in function and there is a chance they will need dialysis in the future. However, this is by no means definite, and there are lots of self-help measures that can prevent further deterioration.

- See the patient information leaflet on page 36 that you can photocopy and give to patients when they are first told they have CKD.



“Because CKD is a chronic illness there is much scope for nurses to help people to have active involvement in their care”

Questions to ask your nurse or at the surgery

What is my kidney function (GFR)?	Is it stable?
What is my long term test of sugar control?	What is my blood pressure?
Do I have a significant urinary protein leak?	What is my haemoglobin level?
Is anything being done about that?	Do I have to modify my diet?
Should I be worried about my cholesterol?	Am I at risk of bone disease?

WHAT TO TELL PATIENTS WITH PROGRESSIVE CKD

If an individual has progressive CKD, it may then be useful to explain the staging of CKD:

To find out how well the kidneys are functioning and the stage of CKD, the estimated glomerular filtration rate (or eGFR) is measured. The eGFR test estimates the volume of blood filtered by the kidneys during a given period of time. It indicates how effectively the kidneys are cleaning the blood. Anyone with an eGFR of 90% or more has normal kidney function.

- Stages 1 and 2 CKD: These stages indicate normal or slightly reduced kidney function, and urine findings/structural abnormalities/genetic trait may point to risk of kidney disease
- Stage 3A and 3B CKD: The eGFR is 30-59 ml/min/1.73m², which indicates moderate reduction in kidney function but not to a level that is worrying or life-threatening. The aim of treatment and lifestyle changes is to keep people within stage 3 CKD and stop them from progressing to stage 4
- Stage 4 CKD: This occurs when eGFR is 15-29% of normal, and indicates a more severe reduction in kidney function. People with stage 4 CKD are more likely to see a specialist for treatment
- Stage 5 CKD: Patients in this category have an eGFR of < 15%. This shows established kidney failure. Dialysis or a kidney transplant may be needed in the future

HOW TO ENCOURAGE PATIENTS TO HELP THEMSELVES

Table 1 summarises the opportunities for helping patients to self-manage CKD.

BLOOD TESTS

People with kidney disease need to attend quite often for blood tests, so encouragement to attend should be accompanied by an explanation of why so many tests are necessary and what they are measuring.

SELF-MONITORING OF BP

Self-monitoring of BP is important and fits with the 'self-care philosophy' often encouraged by renal units. If your surgery has BP machines to lend, patients may be able to use these. If not, it may be appropriate to recommend that they buy their own BP machine. It is important to use a machine validated by the British Hypertension Society (for a list of validated monitors see http://www.bhsoc.org/bp_monitors/automatic.stm).

Both the British Hypertension Society and the BP Association give guidance on how to take home readings. Information on this can be found at:

http://www.bhsoc.org/how_to_measure_blood_pressure.stm

<http://www.bpassoc.org.uk/BloodPressureandyou/Thebasics/Homemonitoring>

LIFESTYLE MODIFICATION

Encouragement should be given to give up smoking, lose weight and take exercise because all of these measures can reduce cardiovascular risk in people who are already at higher risk because they have CKD.

IF THE PATIENT NEEDS TO BE REFERRED TO THE RENAL TEAM

Explain that this does not necessarily mean that dialysis is on the horizon. It may be that a combination of high BP and CKD needs specialist care. Explain that each case

Table 1: Summary of CKD self-management opportunities

Blood tests: Remind patients to come for regular blood tests to monitor kidney function (see blood tests for CKD on page 18)
BP control: Encourage patients to take their tablets as prescribed, and report any side-effects. Explain that reducing raised BP is a key factor in preventing the progression of CKD
BP monitoring: Advise patients to monitor their own BP at home
Smoking cessation
Blood sugar control (if they have diabetes)
Diet: Avoid processed, high-salt and high-fat foods
Medicines management: <ul style="list-style-type: none"> ● Give advice on using over-the-counter medicines (particularly anti-inflammatory drugs) ● Patients should tell their pharmacist that they have CKD ● Patients should be encouraged to report if using certain complementary therapies, such as Chinese herbal medicines
Lifestyle modification: taking exercise and keeping to ideal weight

of CKD is unique to each patient. The specialist's aim is to slow down kidney damage and, if need be, plan for some people to have further treatment, such as management of anaemia or diet, or sometimes to plan for dialysis or a kidney transplant.

RESOURCES

Many people may be shocked on being given a diagnosis of CKD. Patients should be encouraged to read up on the subject and you can reassure them that many people live healthy lives with CKD. Patients should be encouraged to look at recommended websites and other sources of information, and given resources that are accurate and up-to-date to provide them with further information and understanding to help them self-manage their CKD.

more information

- Kidney Research UK/British Renal Society DVD can be purchased through this link <http://www.kidneyresearchuk.org/content/view/385/533>
- Renal Patient View
Online access to an individual's blood results (through live links to hospital laboratories). Patients need to have been referred to a renal unit in order to access this information, and also the renal unit needs to be linked to the system. See www.renalpatientview.org. Once a patient has signed up, they can give permission for the site to be used by their GP, so that GPs can have access to the patient's current blood results and, sometimes, to clinic letters.
- National Kidney Federation <http://www.kidney.org.uk/Medical-Info/index.html> Leaflets can be downloaded or ordered by telephone.

References

1. Warsi A, Wang PS, LaValley MP *et al*. Self-management education programs in chronic disease: a systematic review and methodological critique of the literature. *Arch Intern Med*; 2004; **164**(15): 1641-9.
2. Glasgow RE, Fisher L, Skaff M *et al*. Problem solving and diabetes self-management: investigation in a large, multiracial sample. *Diabetes Care*; 2007; **30**(1): 33-7.
3. Costantini L, Beanlands H, McCay E *et al*. The self-management experience of people with mild to moderate chronic kidney disease. *Nephrol Nurs J* 2008; **35**(2): 147-55.