

Chronic kidney disease

Headlines

Chronic kidney disease (CKD) is common, frequently unrecognised and can exist with other conditions (for example, cardiovascular disease and diabetes). CKD can progress to end stage renal disease in a small number of people.

CKD is usually asymptomatic but is detectable. Early identification and treatment can prevent or delay progression and the development of complications.

CKD is strongly age-related with nearly a third of people aged over 75 years having CKD stage 3-5.

Why is this issue important?

Chronic kidney disease (CKD) describes reduced or abnormal kidney function and/or structure. It is often unrecognised and can exist with other conditions (for example, cardiovascular disease and diabetes). When advanced, it also carries a higher risk of mortality. Some conditions that coexist with CKD become more severe as kidney dysfunction advances. CKD can progress to established renal failure in a small number of people¹.

CKD is usually asymptomatic, but it is detectable, and tests are simple and freely available. There is evidence that early treatment can prevent or delay the progression of CKD, reduce or prevent the development of complications and reduce the risk of cardiovascular disease. However, a lack of specific symptoms means people with CKD are often not diagnosed, or diagnosed late when CKD is at an advanced stage. CKD shares many of the risk factors of other vascular diseases, such as [diabetes](#) and high blood pressure¹.

The national prevalence of CKD from the 2009 Health Survey of England was 14% in men and 13% in women (all stages, all ages)². Those suffering CKD stages 3-5 (more advanced disease) were 5% for men and 7% for women. In Kirklees there is a 55% difference between the expected and observed numbers of people living with CKD³. This may indicate issues with detection and/or poor recording.

What significant factors are affecting this issue?

The risk of developing CKD increases with increasing age¹. Other factors which increase the risk of CKD include hypertension, diabetes, [obesity](#) and [smoking](#)⁴. CKD is more likely to progress to the severe form of end stage renal disease in BME groups⁴.

A large proportion of people with CKD also have other long-term conditions, in particular [cardiovascular disease](#), and this proportion increases with age⁵. The risk of death from cardiovascular disease in people with CKD far outweighs the risk of progress of the kidney disease¹. Complications of CKD include⁶:

- Cardiovascular disease (CVD)
- Mineral and bone disorders (e.g. calcium and phosphate disorders)
- Anaemia
- Malnutrition
- Depression
- Increased risk of other disease e.g. infection and [cancer](#)
- Increased risk of fracture

Having CKD can also increase the risk of hospitalisation, morbidity and death. Reduced kidney function is associated with poorer psychosocial functioning, higher anxiety, higher distress, a decreased sense of well-being, higher depression, and negative health perception⁷.

The cost of treating end stage renal disease is 1-2% of the NHS budget. Early detection is therefore cost effective for both financial and health outcomes⁷.

Which groups are most affected by this issue?

CKD is strongly age-related. In 2009 1% of men and 2% of women aged 16-54 years had CKD stage 3-5. In those aged over 75 years 31% of men and 36% of women had CKD stage 3-5². This also showed a slight gender bias towards women.

Locally, the CLIK 2012 survey did not include CKD as a separate disease, but it is likely that of the 1 in 5 adults with hypertension and the 1 in 14 adults with diabetes, 1 in 3 of those aged over 75 years also had CKD⁸.

Having a family history of kidney disease increases the risk of developing moderate to severe CKD. In women the risk was more than double, and in men, over three times the risk⁹.

Advanced CKD is more prevalent in south Asians in the UK. Compared with white people they had a 2.3-fold higher risk of advanced CKD¹².

What could commissioners and service planners consider?

Strategies aimed at earlier identification and (where possible) prevention of progression to established renal failure are needed. Implementation of the recommendations in NICE Guideline CG73 are therefore vital. This guideline also covered treatment interventions.

Early detection of CKD and good management within primary care are also important to minimise kidney damage. The Renal national service framework advocates quality standards including prevention and early detection of CKD in order to minimise the progression and consequences⁵ and these need to be implemented and maintained.

GP practices should be actively screening those more likely to have CKD and raising awareness about the disease with patients. Training for primary care staff to ensure that they understand the importance of identifying people with CKD early, and to provide ongoing support in the management of CKD including knowing when to refer to secondary care would also help.

Treatment of the causes and risk factors associated with CKD, such as high blood pressure and diabetes is an important part of the prevention and management of CKD. Cholesterol levels also need to be managed within normal limits. People with CKD are advised to stop smoking, reduce their weight if overweight or obese, eat a healthy diet, take regular exercise and manage other long term conditions like diabetes effectively.

More CKD care should take place closer to home, especially for those patients with established kidney failure who are unsuitable for renal replacement therapy and transplant and those requiring end of life care. Support from secondary care is required to enable CKD patients to be managed safely and effectively in primary care.

References

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