**Key findings**

In this systematic review of the adverse effects of frailty in patients with CKD, frailty was a significant predictor of adverse health outcomes, particularly in those with severe CKD stages. Frailty, being a key predisposing factor to adverse health outcomes in patients with CKD, has a great impact on biological systems, functional status, psychological wellbeing, quality of life, and health-care efficacy, of which dialysis access failing and immunosuppressant reduction leading to graft loss.

**Context**

**Application for clinicians, policy, and research**

We illustrated the possible adverse outcomes of frailty in CKD patients, therefore, to prevent or curb the development of frailty may lead to a light prognosis. To determine the underlying mechanism between frailty and its following adverse outcomes can be promising to developing treatments.

**Limitations**

The greatest limitations being the difficulty to determine the direct causal relationship, some articles analyzed causalities with regression or correlation analysis, a few studies used survival analysis and even fewer determined causality with a follow-up study. A great number of articles used odds ratio or risk ratio to try to cope with causality, having a small strength of evidence.