



- Obesity
- Hypertension
- Type 2 Diabetes
- Lifestyle
- Extensive use of NSAIDs
- Age
- Race
- Being male
- History of acute kidney injury
- Abnormal kidney structure

Modifiable

Non-modifiable

Risk factors

Chronic Kidney Disease (CKD)

Systemic Effects

Glomerular filtration rate (GFR)
 <60ml/min/1.73m² is indicative of CKD

Chronic Kidney Disease is the progressive loss in kidney function over a period of months or years

Definition

Effects

Cardiovascular

Increased Fluid Retention
 Electrolyte disturbance

Hypertension
 CAD
 CHF
 Pericarditis

Increased BP
 Oedema
 Increased heart workload

Respiratory

Increased water retention

Pulmonary oedema

Shortness of Breath
 Paroxysmal cough
 Difficulty breathing

Gastrointestinal

Excessive waste and toxins buildup

Digestive infection
 Oral erosion

Decline in appetite
 Nausea and vomiting
 Metallic taste in mouth

Integumentary

Uremic Pruritus
 Dry skin
 Itching

Excessive scratching leads to sores and wound

Increased risk of infection
 Skin colour changes (yellow-gray colour)

Reproductive

Decrease in sexual hormone

Female
 Difficulty achieving orgasm
 Male
 Delayed ejaculation
 Erectile dysfunction

Decrease in libido

Immune

Decreased T-lymphocytes
 Hypoactive monocytes
 Neutrophils
 decreased bactericidal abilities

Defective immune response

Greater risk of acquiring infections

Musculoskeletal

Irregular levels of CA, PTH and Phosphorus

Bone disease associated with skeletal fragility

Fractures
 Osteodystrophy
 Joint pain and stiffness

Haematological

Impaired erythropoietin production and other factors which suppress marrow erythropoiesis

Decrease in RBC, Haemoglobin, platelet count

Anemia
 Increased risk of bleeding
 Fatigue

Impact on Family

- Physical**
 - Burnout from treatment time
 - Changes in daily routine
- Social**
 - Decline in family activities
 - Depression
- Financial**
 - Increased financial stress
 - Less time together as a family
- Spiritual**
 - Blame or displeasure with belief
 - Decline in belief of God

Impact on Individual

- Physical**
 - Fatigue
 - Weakness
 - Lack of concentration
- Social**
 - Isolated and alone
 - Depression
 - Lack of control
- Spiritual**
 - Worried about the future
 - Spiritual withdrawal
- Financial**
 - Guilt about financial pressure
 - inability to commit to work schedule

Impact on Healthcare, Community and Economy

- Healthcare**
 - Increase Healthcare load
 - Increase cost requirements
 - Increase staff
- Community**
 - Earlier retirement
 - Increase pension assistance
- Economy**
 - Increase budget necessary to support healthcare
 - Greater financial strain