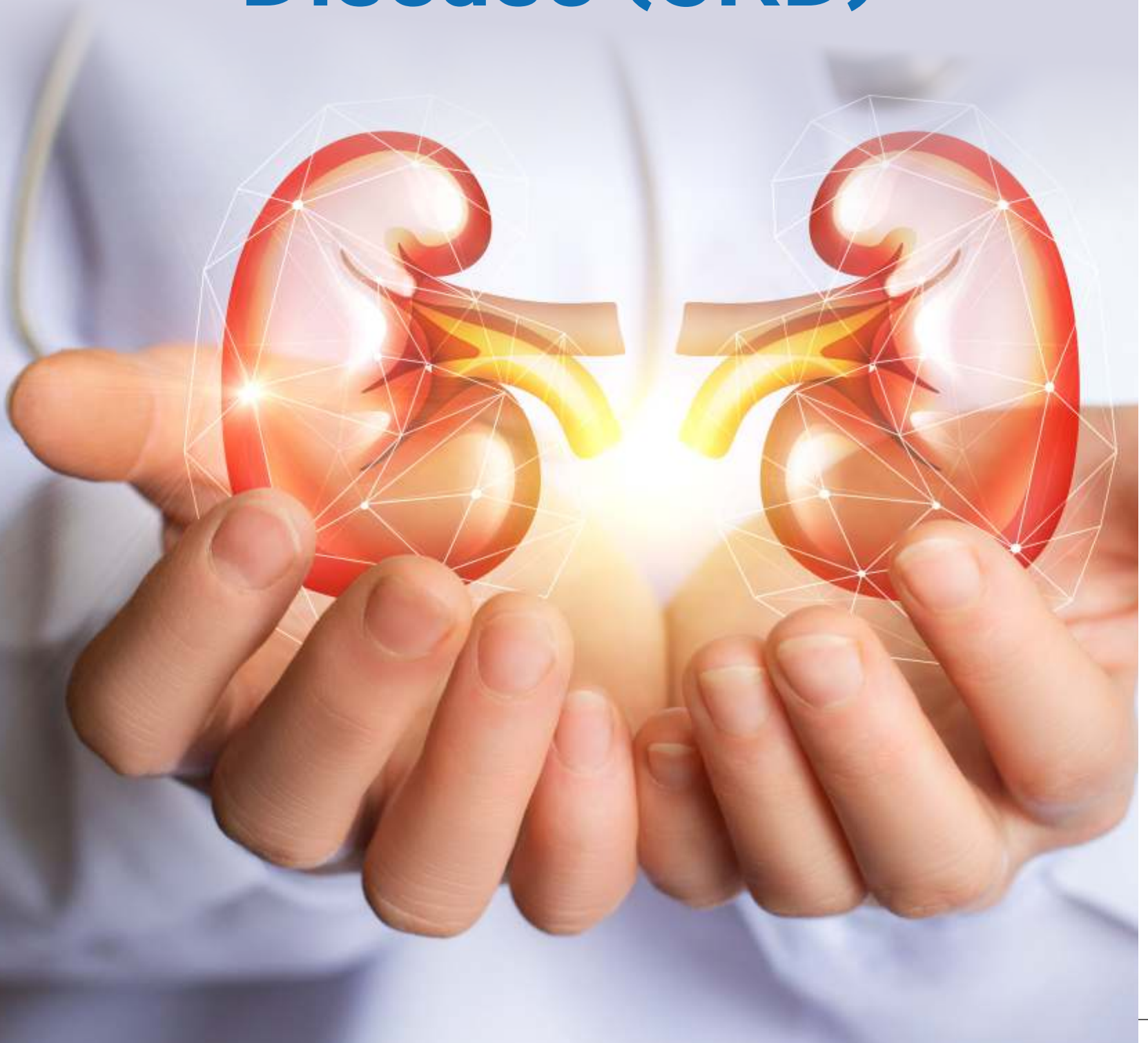


**BMJ**



Three Months Certification Course in

# **Chronic Kidney Disease (CKD)**



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*“Very good information on CKD statistics. Covers a wide range of renal disease very well. The emphasis here was very much on diagnosis of the cause of the CKD which I was so pleased with as most of my reading on CKD has been on detection and monitoring. This module focussed on reaching a diagnosis. It also made the point on the difference in investigation/testing in 'diabetes and CKD' as opposed to 'hypertension and CKD' and flagged up the difference here. At last a full explanation of renal sediments / the various casts seen on urine microscopy in msu's (something I have struggled with for years) !”*

User Feedback



## Introduction to the course

Chronic kidney disease (CKD) is a worldwide public health problem with adverse outcomes of kidney failure and premature death. In India, Global Burden of Disease (GBD) 2015 ranks Chronic Kidney Disease as the eighth leading cause of death.<sup>1</sup>

One in every 10 adults in India suffers from Chronic Kidney Disease (CKD), at any given point.<sup>2</sup> In a multicentric study, conducted by the Indian Society of Nephrology (ISN), the mean age of people with CKD was investigated and it was found that about 20% of patients were aged 38 years.<sup>3</sup>

Identification of CKD in early stages helps to delay the progression of the disease which in turn decreases the economic burden on individual, family and community.

In this context, we have worked to meet the need of medical professionals to have access to CKD management resources and announce the launch of the Three Months Certification Course in Chronic Kidney Disease (CKD). This is a three months certificate course and it has been accredited by the Indian Society of Nephrology (ISN).

The course aims to cover the pathophysiology, presentation, diagnosis of CKD and its complications and treatment of CKD. We hope this course will help clinicians to provide better kidney care to their patients.

We hope that doctors in India avail this opportunity to educate themselves about their key role in detecting and reducing the risk of CKD and in controlling the CKD epidemic.

1. Jha & Modi (2017) Uncovering the rising kidney failure deaths in India. *The Lancet Global Health*, Volume 5, No. 1, e14–e15

2. Chronic kidney disease hits one in 10 Indians, May 19, 2016, *The Hindu*

3. Anand et al (2015) Prevalence of chronic kidney disease in two major Indian cities and projections for associated cardiovascular disease, *Kidney Int. Jul; 88(1): 178–185.*



## BMJ & ISN

### About BMJ

BMJ started out over 170 years ago as a medical journal, publishing our first research paper. Now, as a global brand with worldwide audience, we help medical organizations and clinicians tackle today's most critical healthcare challenges. Today, our expertise extends to medical education, clinical decision support and quality improvement to enhance day to day decision- making and healthcare delivery. However, our core objective remains unchanged. We continue to support medical professionals and organizations in improving the delivery of healthcare. We do this by publishing new academic research, providing professional development solutions and creating clinical decision support tools.

### About Indian Society of Nephrology (ISN)

The Indian Society of Nephrology was born when 10 like-minded and strong-willed individuals sat together on a balmy day in Mumbai (then Bombay) in 1970.

Since its inception, the Society has focussed on the advancement of education and practice aimed towards improving of care of patients with kidney diseases.

The Society has continuously provided a platform for dissemination and sharing of scientific exchange amongst professionals interested in the study of kidney and its diseases in the country.

The Indian Society of Nephrology currently has over 950 members. A vast majority of the members are nephrologists, but they have increasing representation of other specialist, such as transplant surgeons, pathologists and basic scientists which helps widen the base of the Society.

The Society collaborates closely with other like-minded societies such as the International Society of Nephrology and the Asian-Pacific Society of Nephrology for a closer international integration.



### Dr. Saurabh Pokhariyal

Head of department Nephrology and Renal Transplantation.  
Manipal Hospital, Dwarka, New Delhi

I would like to welcome you to this course on Chronic Kidney Disease (CKD). As a major non-communicable disease CKD is assuming epic proportions across the world. Treatment of advanced renal disease by dialysis or renal transplantation is prohibitively expensive and in low income countries very few patients can afford such care. The focus should therefore be on preventing kidney disease or slowing the progression of CKD so that dialysis or transplantation can be avoided. We have put together a comprehensive module on diagnosing, classifying and managing all aspects of CKD and it should go a long way in helping our primary care physicians in caring for such patients.



### Dr. Kieran Walsh

Clinical Director  
BMJ Learning & BMJ Best Practice, London

BMJ is one of the world's leading providers of medical knowledge and education. The BMJ brand stands for medical credibility - we are known around the world for the quality of our content. Our portfolio of learning products provides doctors and other healthcare professionals with the opportunity to engage with the most current and relevant content for their continuing professional development. BMJ is proud to offer the new Chronic Kidney Disease certificate course. The modules in the course have been created and reviewed by eminent subject experts across India. We are sure that this course will help you improve the quality of care that you provide to patients.



## About course & content

### Course Objectives

- Understand the pathophysiology, presentation, diagnosis of CKD and its complications.
- Complete management of CKD and indications for referral to a nephrologist and follow-up and monitoring required.
- To understand the treatment of reversible causes of renal failure in a patient with chronic kidney disease (CKD) and measures to slow progression of kidney disease.
- Understanding and evaluating chronic kidney disease in pregnancy, elderly and children
- The various types of vascular access in dialysis. When to create the access and their relative merits and drawbacks.

### Course USPs

- Course developed by expert panel of nephrologists
- Accreditation by Indian Society of Nephrology (ISN)
- Evidence based and peer reviewed content
- E-learning course designed to fit in the workflow of busy clinicians

# Authors



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\*Names of the Faculty Members are arranged in alphabetical order.



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\* Names of the Reviewers are arranged in alphabetical order.

# Curriculum

## Module 1 Introduction to chronic kidney disease

- Definition of Chronic Kidney Disease (CKD)
- Epidemiology (EPI) of CKD
- Common causes of CKD
- Different stages of CKD
- Indications for referral to a nephrologist
- Follow-up and monitoring required

## Module 2 Screening and diagnostic approach to chronic kidney disease

- To know if screening is helpful in early diagnosis of CKD and its management
- To know who is at high risk of developing CKD
- To choose investigations to screen for CKD
- To diagnose CKD

## Module 3 Clinical assessment in chronic kidney disease

- To help in early diagnosis and optimal management
- Focus on good clinical history and physical examination along with a simple biochemical test help in making a diagnosis
- Identification of people at risk and their screening

## Module 4 Management approach to a patient with chronic kidney disease

- Treatment of reversible causes of renal failure in a patient with chronic kidney disease (CKD)
- Measures to slow the progression of kidney disease
- Treatment and prevention of complications of CKD, e.g. hyperkalemia, volume overload, metabolic acidosis, and malnutrition
- Management of cardiovascular disease in a patient with CKD
- Indications and preparation for renal replacement therapy in a patient with advanced kidney disease

## Module 5 Diabetic and hypertensive nephropathy

- Know how to monitor and manage the various complications of diabetes with particular emphasis on diabetic nephropathy
- Know when to refer a patient with diabetes and hypertension to a nephrologist
- Know the indications of renal biopsy in a patient with diabetes.
- Know how to manage a patient with diabetes and end stage renal disease

## Module 6 Dealing with progression of chronic kidney disease

- To learn about the importance of early detection of chronic kidney disease.
- To learn about the factors influencing the progression of chronic kidney disease
- To learn about the risk factors for how to retard the progression of renal disease

## Module 7 Part A: Managing Chronic Kidney Disease in elderly people

- How to diagnose chronic kidney disease in elderly people
- How to manage chronic kidney disease in elderly people

## Part B: Chronic Kidney Disease in Pregnancy

- The physiological changes in the kidneys that happen during pregnancy
- How to assess kidney function in pregnancy
- How to diagnose chronic kidney disease in pregnancy
- How to manage chronic kidney disease in pregnancy

## Module 8 Chronic kidney disease in children

- How to diagnose and classify chronic kidney disease (CKD) in children
- Epidemiology and etiologies of paediatric CKD
- How to manage patients with pediatric CKD
- Follow up and monitoring required for paediatric CKD patients

# Curriculum

## Module 9 Vaccinations in chronic kidney disease

- Why timely vaccination of patients with CKD is necessary
- What are the mandatory vaccinations that every patient with CKD should receive
- What is the universal vaccination schedule recommended by international bodies

## Module 10 Creating vascular access in patients with chronic kidney disease

- Why creation of an optimal access is necessary
- When an early access should be planned
- What are the different vascular access that can be created
- What are the features of a well-functioning vascular access
- How to evaluate a patient with CKD towards vascular access creation
- The different choices of vascular access available
- How to choose the optimum access in a given clinical situation

## Module 11 Nutrition in adults with chronic kidney disease

- To know about protein-energy wasting (PEW) and the factors associated with it
- To know the parameters used in assessing protein-energy wasting in adults with chronic kidney disease.
- To know about the evidence-based requirements of key nutrients for adults with chronic kidney disease with/without dialysis

## Module 12 Nutrition in children with chronic kidney disease

- To know about protein-energy wasting (PEW) and the factors associated with it
- To know the parameters used in assessing protein-energy wasting in children with chronic kidney disease.
- To know about the evidence-based requirements of key nutrients for children with chronic kidney disease with/without dialysis



## Eligibility & examination pattern

### Eligibility

- Minimum requirement for course intake is MBBS
- Candidate has to be a Registered Medical Practitioner with MCI or any of the state medical councils

### Course Fee

- Online Program: INR 25,000 inclusive of all taxes

### Examination Pattern

- Online evaluation based on Multiple Choice Questions.

*“I picked up some very useful pointers in CKD diagnosis and management”*

User Feedback

*“This module reinforces guidelines and emphasizes the criteria to prompt referral to a Nephrologist. It is a useful introduction to the links between CKD and CVD risk”*

User Feedback

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