

Elective Report

What is the most prevalent chronic disease in India? How does it differ from the rest of the world and discuss this in the context of global health?

One of the most prevalent chronic diseases in India is diabetes. With an estimated 50.8 million people living with diabetes, India has the world's largest diabetes population, followed by China with 43.2 million. The largest age group currently affected by diabetes is between 40-59 years. By 2030 this "record" is expected to move to the 60-79 age group with some 196 million cases.

The estimated diabetes prevalence for 2010 worldwide is 285 million people corresponding to 6.4% of the world's adult population. By 2030, the number of people with diabetes is estimated to have risen to 438 million.

The Diabetes Atlas which is a unique resource on diabetes for a wide range of audiences including decision-makers, public health authorities, health organisations and the healthcare professionals, will be used by the World Diabetes Federation and the World health organisation to communicate the global impact that diabetes has on the world population. The atlas will also be utilised to underline the need for immediate intervention from governments, healthcare professionals, international health organisation and other bodies (1).

How are the health services organised in India? How does it differ from the United Kingdom?

In India, the healthcare services are provided mainly by the public and private sector. The public sector provides health services through the central government, state governments, municipal corporations and other local bodies. The private health sector consists of the 'not-for-profit' and the 'for-profit' health sector. The not for profit health sector which is very small includes health services provided by non-government organisations (NGOs), charitable institutions, missions, trusts, etc. Health care in the for-profit health sector is provided by various types of practitioners and

institutions. The informal sector consists of practitioners not having any formal qualifications, like the faith healers, bhagats, hakims and priests who also provide healthcare. The private sector is a large and is an important constituent in the country's health care delivery system (2).

However in United Kingdom the healthcare is provided mainly by England's public service, the National Health Service (NHS) that provides healthcare to all permanent residents of the United Kingdom which is free at the point of use and paid for from general taxation. Though the public system dominates healthcare provision in England, private health care and a wide variety of alternative and complementary treatments are available for those willing to pay. However there are charges associated with eye tests, dental care, prescriptions and many aspects of personal care that patients are expected to pay. The NHS provides the majority of healthcare in England including primary care, in-patient care, long-term healthcare, ophthalmology and dentistry (3).

Health related Objective: To understand the management of the infectious disease such as Hepatitis E in India?

A patient presented to the doctor with low-grade fever, abdominal distention and yellowish discolouration of the urine. On admission to the hospital, the patient underwent several investigation including an ultrasound of the abdomen, which revealed moderate ascites, hepatomegaly with contracted gall bladder and minimal left pleural effusion. She was admitted to the hospital and underwent several investigations.

The patient had liver function test and the results were as follows:

Date	11/04/11	14/04/11	18/04/11	Reference Range
Bilirubin	10.0	9.1	11.64	0-1.0 mg/dl
Bilirubin Direct	6.4	7.3	9.68	0-0.3 mg/dl
AST (SGOT)	290	84	39	10-32 U/L
ALT (SGPT)	744	349	147	10-33 U/L
ALP	147	129	136	35-104 U/L
Total protein	5.9	5.6	7.3	6.0-8.3 gm/dl
Albumin	2.7	2.7	3.6	3.5-5.0 gm/dl
Globulin	3.2	2.9	3.7	2.3-3.5 gm/dl
A/G RATIO	0.8:1	0.9:1	0.97:1	

The patient also had a viral hepatitis screen for which she was negative for hepatitis A, B and C. The patient had an ultrasound-guided ascitic tap, which did not grow any microorganism

However the patient was positive for Hepatitis E antibody

HEV IgM 4.06 (Index value < 0.9)

Whilst in hospital, she was given the following medication

Pan	40mg	BD	PO
Neopride		OD	PO
Ondem	4mg	OD	PO
Liv 52	2tsp/	TDS	PO
Dulphalnac	30ml/	OD	PO
Vit k	1 AMP	OD	
Tcrocin	500mg	OD	PO

The management of the patient with viral Hepatitis E was mainly symptomatic therapy. She was given an anti-pyretic, anti-emetic and vitamin K to correct the international normalised ratio (INR). She was also prescribed Liv-52, which restores the functional efficiency of the liver by protecting the hepatic parenchyma and promoting hepatocellular regeneration. The anti-peroxidase activity of Liv-52 prevents the loss of functional integrity of the cell membrane, maintain cytochrome p-450, hastens the recovery period and ensures early restoration of hepatic function in infective hepatitis. As a daily health supplement Liv-52 improves appetite, the digestion and assimilation process and promotes weight gain.

The patient should be monitored for improvement of the liver function tests as hepatitis E viral infection has a mortality from fulminant hepatic failure of 1-2% which rises to 20% in pregnant women. Hepatitis E virus has no carrier state and it does not progress to chronic liver disease.

As hepatitis E is enterally transmitted, usually by contaminated water with 30% of dogs, pigs, and rodents carrying the virus, the prevention and control depends on good sanitation and hygiene (4).

Personal/Professional development goals.

To improve my knowledge, skills and attitude of working as a doctor to promote the care of the patient.

Reflective assessment of my activities and experiences.

I learnt that in order to provide the best medical care to a patient, a doctor need to have the knowledge, skills, and attitude. As a medical student, I did not know all the different differential diagnosis of right upper quadrant pain. I do realise that I need to do further reading about the different causes of right upper quadrant pain to improve my knowledge so that in the future I am able to make the right diagnosis.

Consequently this will enable me to give the best care to the patients. I also need to develop the right attitude of acting within the limits of my competence and to always ask for advice from my seniors or other specialist doctors to ensure the safety of the patients. This will ultimately allow me to maintain good medical practice and ensure that the best treatment is given to the patient so as to improve their quality of life.

During my elective attachment I observed the doctors caring for patients on the wards, in the outpatient department and in the emergency department. For instance when a patient presented to the emergency department with an epileptic fit, the patient was admitted to the hospital. The patient had a magnetic resonance-imaging (MRI) scan, which showed no obvious abnormality. The patient was then referred to a neurologist to find the reason why he had an epileptic fit. This shows that the doctor did not rely only on the findings of his examination and practiced within the limits of his competence. The neurologist ordered an electro-encephalogram (EEG) so as to diagnose the patients and ultimately treat the patient.

Furthermore I also realised that the underlying principle for the management of a patient is the same irrespective of the country that the patient belongs to. For instance, the management of the patient with pulmonary tuberculosis in India is that the patient is treated with a combination of anti-tuberculous drugs AKT4 (which contain rifampicin 450mg, INH tab 300mg, Pyrazinamide 750mg, Ethambutol 800mg) and supportive treatment with paracetamol. These are the same drugs, which are used to treat a patient with pulmonary tuberculosis in the United Kingdom.

Hence I can conclude that the underlying aim of medicine to treat patients so as to improve the quality of life of patient is the same irrespective of the country that the patient belongs to.

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