SECTION **A**

# Basic Clinical Medicine and Nursing

## CHAPTERS

CHAPTER

# 1

# History Taking and General Examination

History taking is the most important initial part of making a diagnosis, wherein the health professional gathers information from the patient, builds a relation with him, and decides the direction of investigations and treatment. This is done in a very systematic manner.

**Key components of history taking**

- *Patient identification*
  - Name
  - Age
  - Sex
  - Contact details
  - Occupation
  - Demographic or cultural details relevant to illness.
- *Presenting complaints*
  - The patient must be asked about the primary reason of his visit.
  - These complaints should be noted in his own language.
- *History of presenting complaint*
  - When did the complaint begin?
  - What is its duration?
  - What has been its course over time?
  - Characteristics of symptoms (e.g. location, intensity, quality, timing).
  - Aggravating and relieving factors.
  - Associated symptoms.
- *Past medical history*
  - Previous illnesses, surgeries, hospitalisations, and chronic conditions.
  - Significant childhood illnesses.
  - Mental health history.
- *Medication history*
  - Current and past medications.
  - Adverse drug reactions.
  - Allergies.
- *Social history*
  - History of smoking.
  - Alcohol use.

  - Recreational drug use.
  - Sexual health.
  - Socioeconomic status.
  - Support systems.
- *Psychosocial history*
  - Emotional and psychological well-being.
  - Social stressors, coping mechanisms, and mental health concerns.
- *Review of systems*
  Each organ system is reviewed to uncover any possible additional symptoms. Examples: Respiratory, cardiovascular, gastrointestinal, nervous systems, etc.
- *Respiratory system:* History of previous respiratory illnesses, allergies, hospitalisations? History of current or past medications (inhalers, steroids, antibiotics)? Family history of respiratory illnesses? Smoking, recreational drugs? Occupational exposure? Home environment (dampness, pets, recent renovations/paint jobs)?

**Look for the following complaints:**

- *Cough*
  - Acute (<3 weeks), or chronic (>8 weeks)?
  - Dry or productive?
  - *Sputum:* Color, volume, consistency, and presence of blood.
  - *Triggers:* Cold air, exercise, allergens, or lying flat.
- *Shortness of breath*
  - *Onset:* Sudden or gradual?
  - *Timing:* Worse at rest or with exertion? Nighttime symptoms?
  - *Severity:* Impact on daily activities?
- *Wheezing*
  - Does it occur during exertion, at night, or after certain exposures?
  - History or asthma or COPD?
- *Chest pain*
  - *Location:* Central, pleuritic, or localized?
  - *Character:* Sharp, or dull?
  - *Aggravating factors:* Worsens with deep breaths, coughing, or movement?
  - *Relieving factors:* Does sitting forward help (as in pleurisy)?
- *Coughing up blood*
  - *Volume:* Streaks of blood or large quantities?
  - *Duration:* Single episode or recurring?
  - *Associated symptoms:* Fever, weight loss, fatigue, night sweats.
  - *Fever with respiratory complaints:* Look for signs of infection, malignancy, or chronic disease.
- *Cardiovascular system:* One should ask about history of hypertension, diabetes, hyperlipidemia, or coronary artery disease.

We should also take the history of any previous heart conditions like myocardial infarction, arrhythmia, heart failure, rheumatic fever, angioplasty or coronary artery bypass graft (CABG).

Dietary history (high fat, or high salt)? Sedentary, or active lifestyle?
History of smoking, alcohol use or recreational drugs?
History of any cardiovascular medications being taken currently?
Any family history of cardiovascular disease?

**Look for the following complaints:**

- *Chest pain or discomfort*
  - *Site:* Where is the pain? Does it radiate to the jaw, shoulder, or the left arm?
  - *Onset:* Sudden or gradual?
  - *Character:* Crushing, stabbing, dull, burning, or tightness?
  - *Radiation:* To the neck, back, shoulders, or arms?
  - *Associated symptoms:* Sweating, nausea, or shortness of breath?
  - *Timing:* How long does the pain last? Is it intermittent or constant?
  - *Exacerbating/relieving factors:* Worse with exertion, stress, or eating? Better with rest or taking some medicine for angina? Anginal pain becomes worse with exertion and gets relieved with rest. The pain of myocardial infarction is severe, prolonged, and not relieved by rest. The pain of pericarditis is worse on lying down and becomes better when sitting forward. The pain of aortic dissection is sudden, tearing and radiating to the back.
- *Shortness of breath*
  - Is it out of proportion to the level of activity?
  - Is there shortness of breath even when lying flat? How many pillows are needed to feel comfortable?
  - Does the patient wake up suddenly, gasping for air?
  - Does he have associated cough, wheeze, or frothy sputum?
- *Palpitations*
  - Are they fast, slow, or skipped beats?
  - *Onset/duration:* Sudden or gradual? How long does it last?
  - *Triggers:* Exertion, caffeine, stress, or alcohol?
- *Fainting or dizziness*
  - *Timing:* During exertion, after standing, or while at rest?
  - *Associated symptoms:* Palpitations, chest pain, or a prodrome like dizziness or nausea?
- *Swelling*
  - *Location:* Legs, ankles, or generalized?
  - *Timing:* Worse in the evening or present throughout the day?
- *Intermittent pain in the legs while walking can happen in peripheral vascular disease*
  - *Site:* Pain in calves, thighs, or buttocks during walking?
  - *Relieving factor:* Does the pain improve with rest?
- *Gastrointestinal system:* Take a history of past gastrointestinal illnesses like gastro-esophageal reflux disease (GERD), peptic ulcers, irritable bowel syndrome, Crohn's disease, ulcerative colitis, liver disease pancreatitis, etc.

  Enquire about any GI related hospitalization or surgery. Is the patient taking any medicines that influence the GI tract (like NSAIDs, antibiotics, antacids, proton pump inhibitors, laxatives, antidiarrheals?

  Social history should include the type of diet taken (very spicy), alcohol and caffeine intake, smoking and stress.

  Some GI illnesses are associated with a family history like colorectal cancer, IBD, celiac disease, so this history also has an importance.
- *Stomach pain*
  - *Site:* Where is it located? (e.g. upper abdomen, around umbilicus, or right lower quadrant, etc.)

  - *Onset:* When did it start? Was it sudden or gradual?
  - *Character:* Is it sharp, dull, burning?
  - *Radiation:* Does the pain travel elsewhere, like to the back or shoulders?
  - *Associated symptoms:* Are there any associated symptoms like nausea vomiting, diarrhea, constitution, bloating, jaundice, fever, weight loss, change in stool color, consistency or frequency?
  - *Timing:* is the pain continuous or intermittent? Any association with meals?
  - *Exacerbating/relieving factors:* What makes the pain worse (e.g. eating, lying flat)? What helps (e.g. antacids, bowel movements)?
  - Severity of pain?
- *Mouth:* difficulty in swallowing, painful swallowing, mouth sores.
- *Esophagus:* Heartburn, acid reflux, regurgitation.
- *Stomach:* Nausea, vomiting, early satiety, upper abdominal pain.
- *Bowel:* Blood in stool (bright red or tarry stools), diarrhea, urgency, or incontinence.
- *Systemic symptoms:* Fever, fatigue, weight loss, change in appetite.
- Jaundice
- Blood in vomit.
- *Nervous System:* The patient should be asked about main complaints. Further enquiry should be focused on these complaints (e.g. headache, weakness, numbness, seizures, or dizziness).
  - Past medical history of neurological conditions like stroke, epilepsy, migraine, Parkinson's, etc.
  - Any previous injury to the head or spine?
  - Any history of meningitis or encephalitis?
  - Any history of chronic diseases like hypertension, diabetes, autoimmune diseases?
  - Any history of taking drugs that may cause neurological side effects like sedatives, anti-epileptics?
  - Any history of taking recreational drugs, alcohol?
  - Any history of exposure to chemicals and heavy metals?
  - Vegan diet may lead to vitamin $B_{12}$ deficiency.
  - Is there any family history of neurological conditions like epilepsy, migraines, multiple sclerosis, dementia, Parkinson's?

**Common Neurological Symptoms to Explore**

- *Headache*
  - Location, character (throbbing, sharp, dull).
  - *Associated symptoms:* Nausea, vomiting, photophobia, aura, vision changes, fever?
  - Onset gradual or sudden?
  - Triggers and relieving factors.
  - Neck stiffness?
- *Dizziness or vertigo*
  - True spinning sensation versus light headedness.
  - Associated symptoms like hearing loss, tinnitus, balance problems.

- *Weakness*
  - Onset sudden or gradual?
  - Distribution: focal, one limb, 1/2 of body, symmetrical, distal versus proximal?
  - Fluctuating or worsening?
  - Associated symptoms: numbness, tingling, pain, or bladder/bowel dysfunction?
- *Tingling or numbness*
  - Is the distribution localized or generalized?
  - Is there any associated weakness or burning pain?
- *Seizures or loss of consciousness*
  - Did they involve convulsions, staring, limb jerking?
  - Duration, warning signs, confusion or sleepiness after the event?
  - History of head injury, alcoholism, sleep deprivation?
- *Tremors or involuntary movements*
  - Are tremors present on activity or during rest?
  - Is there any associated stiffness, slowness of movement, or coordination problem?
- *Memory loss or cognitive changes*
  - Short term or long-term memory loss?
  - Personality or behavior changes?
  - Associated confusion, language difficulty, or visuospatial issues?
- *Speech or language problems*
  - Difficulty in speaking (dysarthria) or finding words (aphasia)?
  - Associated facial weakness or limb weakness?
- *General review of nervous system*
  - *Motor:* Weakness, paralysis, tremors, or clumsiness?
  - *Sensory:* Pain, numbness, tingling, burning.
  - *Cranial nerves:* Vision changes, double vision, difficulty in swallowing, loss of smell, or taste hearing issues.
  - *Autonomic symptoms:* Dizziness, sweating abnormalities, bladder or bowel issues, erectile dysfunction.
  - *Cognitive/behavioral:* Memory, mood changes, confusion, hallucinations.
  - *Sleep:* Insomnia, excessive daytime sleepiness, snoring, or apnea.

### Techniques for Effective History Taking

- *Active listening:* The interviewer must pay full attention to the patient without making unnecessary interruptions. Making eye contact with the patient and nodding in between assures the patient that the interviewer is attentive.
- *Open ended questions:* One should always start with broad-based questions like "Can you tell me more about your complaints?" before narrowing down. If the interviewer has already made a diagnosis in his mind even before completing the history, he is likely to influence the patient into parroting his thoughts, so it is the patient who should be allowed to speak.
- *Specific questioning:* For answers that have been vague or incomplete, leading questions should be asked.
- *Empathy and nonverbal communication:* The tone of voice and the body language should be polite.