Respiratory History Taking

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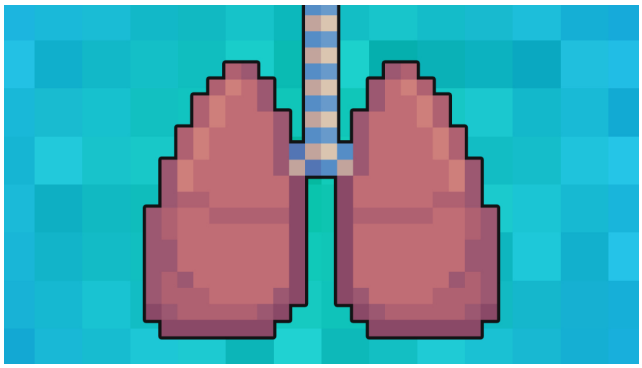

Respiratory history taking is an important skill that is often assessed in OSCEs. This guide provides a structured approach to taking a respiratory history in an OSCE setting.

Download the respiratory history taking PDF OSCE checklist, or use our interactive OSCE checklist.

Opening the consultation

Wash your hands and **don PPE** if appropriate.

Introduce yourself to the patient including your **name** and **role**.

Confirm the patient's **name** and **date of birth**.

Explain that you'd like to take a history from the patient.

Gain consent to proceed with history taking.

General communication skills

It is important you do not forget the **general communication skills** which are relevant to all patient encounters. Demonstrating these skills will ensure your consultation remains patient-centred and not checklist-like (just because you're running through a checklist in your head doesn't mean this has to be obvious to the patient).

Some **general communication skills** which apply to all patient consultations include:

- Demonstrating empathy in response to patient cues: both verbal and non-verbal.
- Active listening: through body language and your verbal responses to what the patient has said.
- An appropriate level of eye contact throughout the consultation.

- Open, relaxed, yet professional body language (e.g. uncrossed legs and arms, leaning slightly forward in the chair).
- Making sure not to interrupt the patient throughout the consultation.
- Establishing rapport (e.g. asking the patient how they are and offering them a seat).
- Signposting: this involves explaining to the patient what you have discussed so far and what you plan to discuss next.
- Summarising at regular intervals.

You might also be interested in our **OSCE Flashcard Collection** which contains **over 2000 flashcards** that cover **clinical examination**, **procedures**, **communication skills** and **data interpretation**.

Presenting complaint

Use **open questioning** to explore the patient's **presenting complaint**:

- *"What's brought you in to see me today?"*
- *"Tell me about the issues you've been experiencing."*

Provide the patient with enough **time** to answer and avoid interrupting them.

Facilitate the patient to **expand** on their **presenting complaint** if required:

> *"Ok, can you tell me more about that?"*

Once the patient has finished speaking, it is helpful to check if there are any other **issues**. If the patient has **multiple presenting complaints**, work with them to **establish a shared agenda** for the rest of the consultation:

> *"Ok, so you've mentioned that you have three problems today that you'd like addressing. As there may not be time to address them all thoroughly in this consultation, it would be helpful to know which of the issues you feel is most important to deal with today. I'll then let you know which of these issues I feel is the priority and we can agree on what the focus of today's consultation should be. Does that sound ok?"*

Open vs closed questions

History taking typically involves a combination of **open** and **closed questions**. Open questions are effective at the start of consultations, allowing the patient to tell you what has happened in their own words. Closed questions can allow you to explore the symptoms mentioned by the patient in more detail to gain a better understanding of their presentation. Closed questions can also be used to identify relevant risk factors and narrow the differential diagnosis.

History of presenting complaint

Patients with respiratory pathology can present with a wide variety of symptoms including but not limited to, cough, chest pain and dyspnoea. The **SOCRATES** acronym (explained below) is a useful tool that you can use to explore each of the patient's presenting symptoms.

Key respiratory symptoms

Symptoms that are typically associated with **respiratory disease** include:

- **Dyspnoea**: shortness of breath associated with a wide range of respiratory pathology including pneumonia, asthma and chronic obstructive pulmonary disease (COPD).
- **Cough**: can be productive (e.g. pneumonia, COPD, bronchiectasis) or dry (e.g. pulmonary fibrosis, side effect of ACE inhibitors).
- **Haemoptysis**: the coughing up of blood originating from the respiratory tract below the level of the larynx. Haemoptysis is typically associated with lung cancer but can be a rare clinical feature of pulmonary embolism.
- **Wheeze**: a continuous, coarse, whistling sound produced in the respiratory airways during breathing. It is commonly associated with conditions such as asthma, COPD and anaphylaxis.
- **Chest pain**: typically worsened by deep inspiration due to being pleuritic in nature (e.g. pulmonary embolism, pleurisy).
- **Systemic symptoms**: these can include fatigue (e.g. lung cancer, COPD), fever (e.g. pneumonia), and weight loss (e.g. end-stage COPD, lung cancer).

SOCRATES

The **SOCRATES** acronym is a useful tool for exploring each of the patient's presenting symptoms in more detail. It is most commonly used to explore pain, but it can be applied to most other symptoms, although some of the elements of SOCRATES may not be relevant to all symptoms.

Site

Ask about the **location** of the symptom:

- *"Where is the pain?"*
- *"Can you point to where you experience the pain?"*

Onset

Clarify **how** and **when** the symptom developed:

- *"Did the shortness of breath come on suddenly or gradually?"*
- *"When did the shortness of breath first start?"*
- *"How long have you been experiencing the shortness of breath?"*

Character

Ask about the **specific characteristics** of the symptom:

- *"How would you describe the shortness of breath?"* (e.g. "tight chest", "can't take a deep breath")
- *"Is the shortness of breath constant or does it come and go?"*

Radiation

Ask if the symptom **moves anywhere** else:

> *"Does the chest pain spread elsewhere?"*

Associated symptoms

Ask if there are other symptoms which are **associated** with the primary symptom:

> *"Are there any other symptoms that seem associated with the pain?"* (e.g. fever in pneumonia, shortness of breath and haemoptysis in pulmonary embolism)

Time course

Clarify how the symptom has **changed** over **time**:

> *"How has the shortness of breath changed over time?"*

Exacerbating or relieving factors

Ask if anything makes the symptom **worse** or **better**:

- *"Does anything make the shortness of breath worse?"* (e.g. exertion, exposure to an allergen, cold air)
- *"Does anything make the pain better?"* (e.g. rest, inhaler)

Severity

Assess the **severity** of the symptom by asking the patient to grade it on a scale of 0-10:

> *"On a scale of 0-10, how severe is the chest pain, if 0 is no pain and 10 is the worst pain you've ever experienced?"*

If the symptom is **shortness of breath**, the severity can be bluntly assessed by assessing if the patient is able to **speak in full sentences** without having to take a breath. You can also ask how far a patient is able to walk (either on the flat or at an incline) without having to stop to take a breath to get an idea of their current performance status.

Respiratory risk factors

When taking a respiratory history it's essential that you identify **risk factors** for **respiratory disease** as you work through the patient's history (e.g. past medical history, family history, social history).

Important **respiratory risk factors** include:

- Pre-existing respiratory disease (e.g. asthma, COPD)
- Family history of respiratory disease (e.g. cystic fibrosis, alpha-1 antitrypsin deficiency)
- Smoking
- Occupational exposure (e.g. coal mining, farming)
- Hobbies (e.g. bird keeping)

Ideas, concerns and expectations

A key component of history taking involves exploring a patient's **ideas**, **concerns** and **expectations** (often referred to as **ICE**) to gain insight into how a patient currently perceives their situation, what they are worried about and what they expect from the consultation.

The exploration of ideas, concerns and expectations should be **fluid** throughout the consultation in **response to patient cues**. This will help ensure your consultation is more **natural**, **patient-centred** and not overly formulaic.

It can be challenging to use the ICE structure in a way that sounds natural in your consultation, but we have provided several examples for each of the three areas below.

Ideas

Explore the patient's **ideas** about the current issue:

- *"What do you think the problem is?"*
- *"What are your thoughts about what is happening?"*
- *"It's clear that you've given this a lot of thought and it would be helpful to hear what you think might be going on."*

Concerns

Explore the patient's current **concerns**:

- *"Is there anything, in particular, that's worrying you?"*
- *"What's your number one concern regarding this problem at the moment?"*
- *"What's the worst thing you were thinking it might be?"*

Expectations

Ask what the patient hopes to **gain** from the consultation:

- *"What were you hoping I'd be able to do for you today?"*
- *"What would ideally need to happen for you to feel today's consultation was a success?"*
- *"What do you think might be the best plan of action?"*

Summarising

Summarise what the patient has told you about their **presenting complaint**. This allows you to **check your understanding** of the patient's history and provides an opportunity for the patient to **correct** any **inaccurate information**.

Once you have **summarised**, ask the patient if there's anything else that you've **overlooked**. Continue to **periodically summarise** as you move through the rest of the history.

Signposting

Signposting, in a history taking context, involves explicitly stating **what you have discussed so far** and **what you plan to discuss next**. Signposting can be a useful tool when **transitioning** between different parts of the patient's history and it provides the patient with time to **prepare** for what is coming next.

Signposting examples

Explain what you have covered so far: *"Ok, so we've talked about your symptoms, your concerns and what you're hoping we achieve today."*

What you plan to cover next: *"Next I'd like to quickly screen for any other symptoms and then talk about your past medical history."*

Systemic enquiry

A **systemic enquiry** involves performing a brief screen for symptoms in other body systems which may or may not be relevant to the primary presenting complaint. A systemic enquiry may also identify symptoms that the patient has forgotten to mention in the presenting complaint.

Deciding on which symptoms to ask about depends on the presenting complaint and your level of experience.

Some examples of **symptoms** you could **screen for** in each **system** include:

- **Systemic**: fevers, weight change, fatigue
- **Cardiovascular**: chest pain, palpitations, oedema, syncope, orthopnoea
- **Gastrointestinal**: nausea, vomiting, dysphagia, abdominal pain
- **Genitourinary**: oliguria, polyuria
- **Neurological**: visual changes, motor or sensory disturbances, headache, confusion
- **Musculoskeletal**: chest wall pain, trauma
- **Dermatological**: rashes

Travel history

If the patient's symptoms are suggestive of an **infective aetiology**, particularly tuberculosis (TB), take a travel history to assess exposure risk (e.g. travel through areas of high TB prevalence).

Past medical history

Ask if the patient has any **medical conditions**:

- *"Do you have any medical conditions?"*
- *"Are you currently seeing a doctor or specialist regularly?"*

If the patient does have a medical condition, you should gather more details to assess **how well controlled** the disease is and what **treatment(s)** the patient is receiving. It is also important to ask about any **complications** associated with the condition including **hospital admissions** (e.g. if asthmatic, ask if they have ever been admitted to ITU with an exacerbation).

Ask if the patient has previously undergone any **surgery** or **procedures** (e.g. lobectomy, bronchoscopy):

- *"Have you ever previously undergone any operations or procedures?"*
- *"When was the operation/procedure and why was it performed?"*

Immunisation history

Ask the patient if they have been **vaccinated** against respiratory diseases such as:

- Influenza
- Pneumococcus
- COVID-19
- Tuberculosis

You should also clarify when the patient received these vaccinations.

Allergies

Ask if the patient has any **allergies** and if so, clarify **what kind of reaction** they had to the substance (e.g. mild rash vs anaphylaxis).

Examples of relevant medical conditions

Medical conditions relevant to **respiratory disease** include:

- Asthma
- COPD
- Lung cancer
- Bronchiectasis
- Pulmonary fibrosis
- Pulmonary embolism

- Tuberculosis
- Neuromuscular conditions (e.g. motor neurone disease)
- Congestive heart failure
- Cor pulmonale
- Cystic fibrosis
- Alpha-1 antitrypsin deficiency

Drug history

Ask if the patient is currently taking any **prescribed medications** or **over-the-counter remedies**:

> *"Are you currently taking any prescribed medications or over-the-counter treatments?"*

If the patient is taking prescribed or over the counter medications, **document** the **medication name**, **dose**, **frequency**, **form** and **route**.

Ask the patient if they're currently experiencing any **side effects** from their medication (e.g. dry cough with ACE inhibitor):

> *"Have you noticed any side effects from the medication you currently take?"*

Commonly prescribed respiratory medications

Medications commonly **prescribed** to patients with respiratory disease include:

- Short-acting beta-2-agonist inhalers (e.g. salbutamol, terbutaline)
- Long-acting beta-2-agonist inhalers (e.g. salmeterol, formoterol)
- Inhaled corticosteroid inhalers (e.g. fluticasone, budesonide, beclometasone)
- Short-acting antimuscarinic inhalers (e.g. ipratropium)
- Long-acting antimuscarinic inhalers (e.g. tiotropium)
- Oral steroids (e.g. prednisolone)
- Theophylline
- Antibiotics (e.g. co-amoxiclav, doxycycline, azithromycin)
- Anticoagulants (e.g. warfarin, apixaban)

Some **over the counter drugs** which may impact the respiratory system include:

- Aspirin (may worsen haemoptysis if already present)
- St John's Wort (an enzyme inducer which may reduce the effects of warfarin)

Medications with respiratory side effects

Medications with **respiratory side effects** include:

- Beta-blockers and NSAIDs (bronchoconstriction)
- ACE inhibitors (dry cough)
- Oestrogen-containing medication (increased risk of pulmonary embolism)

- Amiodarone and methotrexate (pleural effusions, interstitial lung disease)

Family history

Ask the patient if there is any **family history** of respiratory disease (e.g. asthma, eczema, hay fever, cystic fibrosis, lung cancer):

> *"Do any of your parents or siblings have any lung problems?"*

If one of the patient's close relatives are **deceased**, sensitively determine the **age at which they died** and the **cause of death**:

- *"I'm really sorry to hear that, do you mind me asking how old your mother was when she died?"*
- *"Do you remember what medical condition was felt to have caused her death?"*

Social history

Explore the patient's **social history** to both understand their **social context** and identify potential **respiratory risk factors**.

General social context

Explore the patient's **general social context** including:

- the type of accommodation they currently reside in (e.g. house, bungalow) and if there are any adaptations to assist them (e.g. stairlift, home oxygen)
- who else the patient lives with and their personal support network
- what tasks they are able to carry out independently and what they require assistance with (e.g. self-hygiene, housework, food shopping)
- if they have any carer input (e.g. twice daily carer visits)

Smoking

Record the patient's **smoking history**, including the type and amount of tobacco used.

Calculate the number of '**pack-years**' the patient has smoked for to determine their cardiorespiratory risk profile:

- pack-years = [number of years smoked] x [average number of packs smoked per day]
- one pack is equal to 20 cigarettes

See our smoking cessation guide for more details.

Alcohol

Record the **frequency**, **type** and **volume** of **alcohol** consumed on a weekly basis.

See our alcohol history taking guide for more information.

Recreational drug use

Ask the patient if they use **recreational drugs** and if so determine the type of drugs used and their frequency of use. Smoking drugs such as cannabis regularly increases the risk of lung cancer.

Gambling

Ask the patient if they **gamble** and if they feel this is a problem.

Gambling is causative of several decrements to health directly, such as increased sedentary behaviour during the time spent gambling, poor sleep, reduced levels of self-care and anxiety. Patients with a gambling problem are also more likely to have substance misuse issues.[1]

Problematic gambling can be assessed via the Problem Gambling Severity Index (PGSI).

Exercise

Ask if the patient regularly **exercises** (including frequency and exercise type).

Occupation

Explore the patient's current and previous **occupations** to identify potential exposure to agents which can lead to respiratory disease:

- Coal mining is associated with the development of pneumoconiosis.
- Farmers are at increased risk of developing allergic extrinsic alveolitis.
- Those working in shipyards, construction and plumbing may have been exposed to asbestos increasing their risk of mesothelioma.

Pets and hobbies

Ask if the patient has any **pets**: allergies to pets are common and may not be immediately obvious (e.g. the patient has a wheezy chest when at home, but not when outside).

Hobbies such as **bird-keeping** can increase a patient's risk of developing allergic extrinsic alveolitis (often referred to as 'bird fancier's lung').

Closing the consultation

Summarise the **key points** back to the patient.

Ask the patient if they have any **questions** or **concerns** that have not been addressed.

Thank the patient for their time.

Dispose of PPE appropriately and **wash your hands**.

References

1. World Health Organisation. *The epidemiology and impact of gambling disorder and other gambling-related harm*. Published 26-28 June 2017. Available from: [LINK].

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