Taking drug histories and pharmaceutical care planning

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Many patients concurrently use multiple medications, prescribed by multiple doctors, in multiple settings. Often information about medicines can be poorly transferred and so a structured approach to medication history should be taken.

This guide can be used in two ways, to enhance any history that includes a drug history or specifically by professionals wanting to focusing on a collecting a detailed drug history, such as pharmacists and pharmacy technicians or medics and nurses during medication review consultations.

Opening the consultation

Introduce yourself - name and role
Confirm the patient’s details - name and DOB
Explain the reason for the consultation
Gain consent
Ensure the patient is comfortable
Start by asking if the patient has any concerns about their medication?
Even if you think this is a simple query, try not to answer it straight away as without knowing the patient’s full pharmaceutical history you can not really know how complicated their concern may be. If the patient has a concern say something like “We can come back to that once we know a little bit more about your medication history”.

Example

“Hello, my name is Adam and I’m the pharmacist working on the ward today.”
“Can I confirm your name is [Mary Smith] and your date of birth is [12th July 1958]”
“I’d like to ask you some questions about your medication.”
“Is that okay?”
“Before we start, do you have any concerns about your medication that you’d like to bring up?”
“We can come back to that once we know a little bit more about your medication history”.

Current prescribed medication

This section forms the basis of the history, as some of the most dangerous medications are prescribed, rather than purchased. There are six key bits of information you need to obtain about medication the patient is using - the super six

What is it? Drug name or characteristics. This seems like a pretty obvious one but you’ll be surprised how often it gets missed. The pronunciation of drug names vary greatly so you may need to think outside the box when the patient tells you they’re taking a product you’ve never heard of. Patients might also describe their medication based on colour, size, shape of the actual formulation or the container.

What is it for? Indication, many drugs have multiple indications and the most common indication may not be the reason the patient is taking the medication. Indications also change with time as products come in and out of pharmacy fashion. For example, at one time, Pregabalin was prescribed only to treat epilepsy, now it is prescribed for neuropathic pain and generalised anxiety disorder. Medications can provide a collateral history for the medical history, the patient may not mention that they have pain or anxiety in their medical history but if they’re taking medication for it then they probably have a diagnosis that may have been missed, so it is important not to assume what the drug is being used for.
How much (or How many)? When asking patients for information about their medication, it is important to remember they may not think about doses in terms of milligrams or micrograms but rather one or two tablets, spoonfuls, capsules, puffs etc. It can be worth asking how ‘strong’ the medication is as sometimes patients will describe the dose of their medications this way.

How often? This question provides information in two ways. Firstly it provides you with information about the full dosing regimen by providing the frequency, e.g. the patient takes one pink capsule three times a day. But it also provides some information about the patients’ adherence to their treatment. In response to this question, the patient may say ‘now and again’ or ‘every day’ and this can help you identify if their presenting complaint may be due to medication non-adherence, including over-use and under-use.

Since when? Knowing how long the patient has been taking the medication is important as if medication has been started recently then patients are at an increased risk of Type A pharmokinetic effects (e.g. diarrhoea, hypoglycaemia, hypokalaemia) or Type B pharmacodynamic effects (e.g. anaphylaxis, blood dycrasias) or Type C statistical effects (e.g. typically only seen at cohort level when patients have been using medication for a long period of time e.g. gastric ulceration with NSAIDs).

How do you take it? Medication can behave differently depending on how it is taken. For example medication that is taken with food is absorbed more slowly than medication taken on empty stomach another example could be medication that is taken with milk (or close to breakfast) can chelate and not be absorbed at all, so it is important to find out how the patient takes the medication. This question should also help you identify if the patient is using a multiple-compartment compliance aid (MCCA, a.k.a dosette box, tray, NOMAD, pill box) which, if not identified, can significantly delay discharge from hospital. Also if you haven’t already found out from the early questions, this question will also help you to identify what formulation the medication is, e.g. liquid, capsules, inhaler or subcutaneously injected etc. This is important to know as it may influence further investigations you may wish to do, such as explore the patients’ technique (google ‘House Inhaler Video’).

After getting this information you summarise in one sentence to double check you got the correct information.

You should ask the super six about each and every medication that is prescribed for the patient. You may notice that some patients will start to volunteer the information that you require readily as they predict what question is coming next. This is a good sign, as it supports the patient to think about the relevant information they need to share with healthcare professionals. Make sure to give the patient plenty of time to answer and try not to interrupt them.

Once the patient says they take no other prescribed medication, it’s time to check for things that patients do not think are medication but may still be prescribed.

Example

“I’d like to start by finding out what medications you are prescribed by your GP or any specialists that you see and dispensed by a pharmacy?

1. What is it? What do you call the medication you take?
2. What is it for? Why do you take that one?
3. How much (or How many)? How much of that do you take?
4. How often? How often do you take that? Is that [x] times a day regularly or just now and then?
5. Since when? How long have you been taking that?
6. How do you take it? On a typical day, how would you take that one? with food, or on empty stomach?

Okay, just to summarise, you take [Pregabalin] for [anxiety], [one capsule] [three times a day]. You have been on it for [6 years] and you take it [regularly, on empty stomach]. Is that right?

[Repeat for each prescribed medication]

Okay thank you.”
Unprescribed medications

After asking about prescribed medications, it’s important to check the patient doesn’t take anything else that is unprescribed that patients purchase over-the-counter or, increasingly, from the internet for self-care.

This could include supplements, vitamins, herbal remedies or homeopathic remedies.

This is important information as many of these products will influence the pharmacodynamic and pharmacokinetic properties of prescribed medication. For example, St John’s Wort can increase the metabolism and therefore reduce the efficacy of oral contraceptives.

As well as finding out what these products are using the super six you should also ask as a seventh question about where the patient get’s these from. If the products are purchased from a pharmacy, it is likely the product is high-quality and is what it says it is. However the the product has been purchased online or from overseas, then the patient may be using a poor quality product. If this is the case, you should ask to see the product and ask the senior pharmacy team for support, particularly if the pathology of the presenting complaint is unclear.

Example

“Do you take anything that you buy from a supermarket or over the internet?”

If yes, use the super six to find out more information about those products followed by

“Where do you get that from?”

Extra medications

When asking about prescribed and unprescribed medication, patients often forget to mention products that many people do not classify as medications, such as eye drops, inhalers, sprays, patches or creams. However, many of these products contain pharmacologically active ingredients that can cause or exacerbate medical conditions.

Example

“Do you take any eye drops, ear drops, inhalers, sprays, patches, injections, creams or ointments?”

When you do this, try and point to your eyes, ears, mimic taking an inhaler or spray, applying a patch to the top of your arm or applying cream. This isn’t evidence-based but it does sometimes trigger the patient’s memory and can be entertaining to watch.

If the patient says they take one of those, ask the super six.

Social Pharmacy History

It might seem odd, but a patient’s social history will also provide useful information when reviewing a patient’s pharmaceutical care. For example, smoking tobacco induces enzymes that speed up the metabolism of Theophylline and changes to the consumption of Vitamin K can reduce the efficacy of Warfarin. Asking about a patient’s social history, also facilitates asking questions about any drugs that may be used or have been used historically for social or recreationally, such as cannabis or ecstasy.

Asking questions about the patients’ lifestyle will also provide collateral information about their treatment adherence. For example, someone who leaves at 5am for a 90-minute commute to work is unlikely to want to
take their Furosemide first thing in the morning. Additionally finding out if the patient has any support at home to take their medications may influence future prescribing decisions.

This is also a good opportunity to ask about any side effects or allergies the patient may have to any medication.

**Example**

“I’m going to ask you some questions about your lifestyle now, is that okay?”

Talk me through a typical day, from when you wake up to when you go to bed and how your medications fit into that?

Listen carefully to the patients response. Ask the questions below if they are not covered by the patients response.

**Do you work?**
   *What do you work as?*

**Do you have any help with your medications at home?**
   *Is this form carers or family?*

**Do you smoke any tobacco?**
   *How many?*
   *How often?*
   *Since when?*

**Do you drink any alcohol?**
   *What?*
   *How much?*
   *How often?*

**Do you use any recreational drugs, like cannabis?**
   *What?*
   *How much?*
   *How often?*

**What do you usually eat?**

**Do you do any exercise?**
   *What types of exercise do you do?*
   *How often?*

**Have you ever had any side effects to any medications?**

**Do you have any allergies to medications?**

**Giving information**

**Identifying the pharmaceutical care issue**

It’s important to start by giving the patient the opportunity to tell you if they have any additional concerns about their medication that have come up since you began chatting. This opportunity also lets you double check the patients main concern.

It’s important to explain what you think the problem might be to the patient, for example if the medication may be causing an unwanted effect or not being used correctly. The patient will be able to offer you their
perspective of your interpretation and validate or criticise your position. This is helpful as it provides a sense check for you.

If a patient is unwilling to change the way they use a medication and you feel that they’re at a high-risk of significant harm then you can say something like “I’m going to have to stop that medication because….”

**Example**

“You mentioned you were concerned about .... Is there anything else you’re concerned about?”

“Something I’m concerned about in relation to your medication is that ....

you mentioned that you take your ibuprofen without food?
you mentioned that that you miss your insulin now and again?
you mentioned that you crush your modified-release carbamazepine?”

“I’m concerned about this because....

when you take ibuprofen that way it can upset your tummy and cause ulcers.
when you miss insulin it can cause problems for your diabetes.
when you crush your carbamazepine it may not work as effectively as it should.

“Would you be interested in changing the way you use that medication?”

**Propose an acute plan of action**

The action plan will depend greatly on the patient’s perspectives. They may be unwilling to change to many medications at once as this might disrupt their routine or they may be fearful to lose what health they have. Although the content of individual patients’ plans will vary greatly, each pharmaceutical care plan should include the following points.

This may simply be to carry on or continue therapy as usual. Or it may be to reduce a dose, increase a dose, withhold a medication temporarily or add in an additional therapy to deal with a side effect (e.g. adding a laxative following opioid-induced constipation). It may be to refer to a specialist pharmacist, medical consultant, GP or nurse if you have reached your level of competence and require additional input. Either way, plans should include short-term and long-term outcomes.

A short-term plan
The goal?
Who will do what?
Over how long?
Any monitoring required?

A long-term plan:
Who will do what?
Over how long?
Any monitoring required?

**Example**

“Okay, so in the short term, we would like to reduce your dose of diazepam as you feel like it is making you too drowsy.
Let’s change your dose from tomorrow so you take 5mg less so from tomorrow , for the next two weeks, you will only take one diazepam tablet each day.
I will give you a call in two weeks to see how you’re getting on.
Is that okay?”
In the long-term
I think the reset of your medication is okay,
so we can ask the GP team to review everything again in six months.
I don’t think we need any additional monitoring or tests done at this point for anything. Is that okay?”

Closing

When closing the consultation it’s a good idea to summarise as much as you can, including the information on
the current prescribed medication, the unprescribed and the extras to make sure something hasn’t been missed.
You should also summarise the short term and long term plan so that patient understand it fully and give the
patient a final opportunity to ask any questions about what has been covered and anything that has not been
covered.

Example

Summarise, Summarise, Summarise
Offer an opportunity to ask any further questions?
Thank the patient

“Okay so we’ve discussed your medication which included [two inhalers, your medication for anxiety, pain,
diabetes, epilepsy and headaches and the vitamins you buy over the counter. The plan is to reduce your
diazepam by one tablet each day and I’m going to call you in two weeks to see how you feel that is going and
then review everything else again at your usual review appointment with the GP surgery.”
“This do you have any questions about what we’ve covered in this consultation?”
“Do you have any questions about anything we haven’t covered that I may be able to help with?”
“If you think of anything afterwards, my name is Adam and you can get in touch with me by asking the nurses
to contact pharmacy/calling me on 1234 567 8912”
“Thank you”

After the consultation

The patient is the most valuable source of information in relation to their medication - they’re the ones who
ultimately take them. However, if possible, you should try and obtain a collateral history from another source
to confirm the patients’ doses. Some sources you may want to consider using include
- Summary Care Record
- Hospital records
- Patient’s copy of their repeat prescription
- The actual products (some patients bring their medication to consultations or hospitals in a Green Bag which
  makes it much easier to check doses. Be wary that this medication is actually the patients and not their
  partners, cats or dogs.)
- Care Home medication administration record
- Community pharmacy
- Family members or carers

Following the consultation you should try and record the information in the patients notes, including what
sources you used. It may be possible to add this to the patients current prescribed medication if you’re using
an electronic prescribing system or you may have to free-type or write out the information directly into the
patients paper notes. This can be time consuming but try not to rush - many significant patient safety incidents
occur because medication-related information is transcribed incorrectly. Take your time and double check
what you have documented is what you intended.

If you’re free typing/hand writing in paper notes. Try and include the super six pieces of information for each
medication as a minimum as well as your short and long term plan of action.
OSCE Mark Scheme

Introduces self
Establishes identity of person they are speaking to
Establishes reason for consultation
Obtains consent

Drug 1
Identifies drug name and indication e.g. salbutamol for asthma
Identifies how much and how often it is taken e.g. one puff when required
Identifies medication start date e.g. four years ago
Identifies how it is taken e.g. inhale it quickly when breathless
Asks about adherence e.g. only take it when required

Drug 2
Identifies drug name and indication e.g. brown inhaler for asthma
Identifies how much and how often it is taken e.g. two puffs twice a day
Identifies medication start date e.g. three years ago
Identifies how it is taken e.g. inhale it quickly upon waking
Asks about adherence e.g. often forgets the evening dose

Asks about occupation e.g. works at mcdonalds
Asks about carers e.g. parents sometimes try and remind him to take medication
Asks about smoking tobacco e.g. no, never
Asks about alcohol intake e.g. no, never
Asks about recreational drug use e.g. smokes cannabis, twice a week with friends
Asks about diet e.g. usually a Big Mac after work most weeks, mother cooks most other food
Asks about exercise e.g. little to none, as get out of breath easily and need inhaler

Identified pharmaceutical issue e.g. missing doses of inhaled corticosteroids
Offers acute advice e.g. set a reminder to take it before bed and keep by bedside
Provides long-term follow-up options e.g. try using salbutamol before exercise

Summaries
Offers opportunity for further interaction

Asks about allergies e.g. rash to penicillin

References/Further reading


