



Welcome to the topic on Health behaviour change in chronic disease management.

By the end of this module, you will be able to:

- 1 Distinguish between chronic illness and chronic disease
- 2 Describe medically recommended behaviours for chronically ill clients
- 3 List the consequences of not following recommended lifestyle
- 4 Identify the typical behaviours of chronically ill clients



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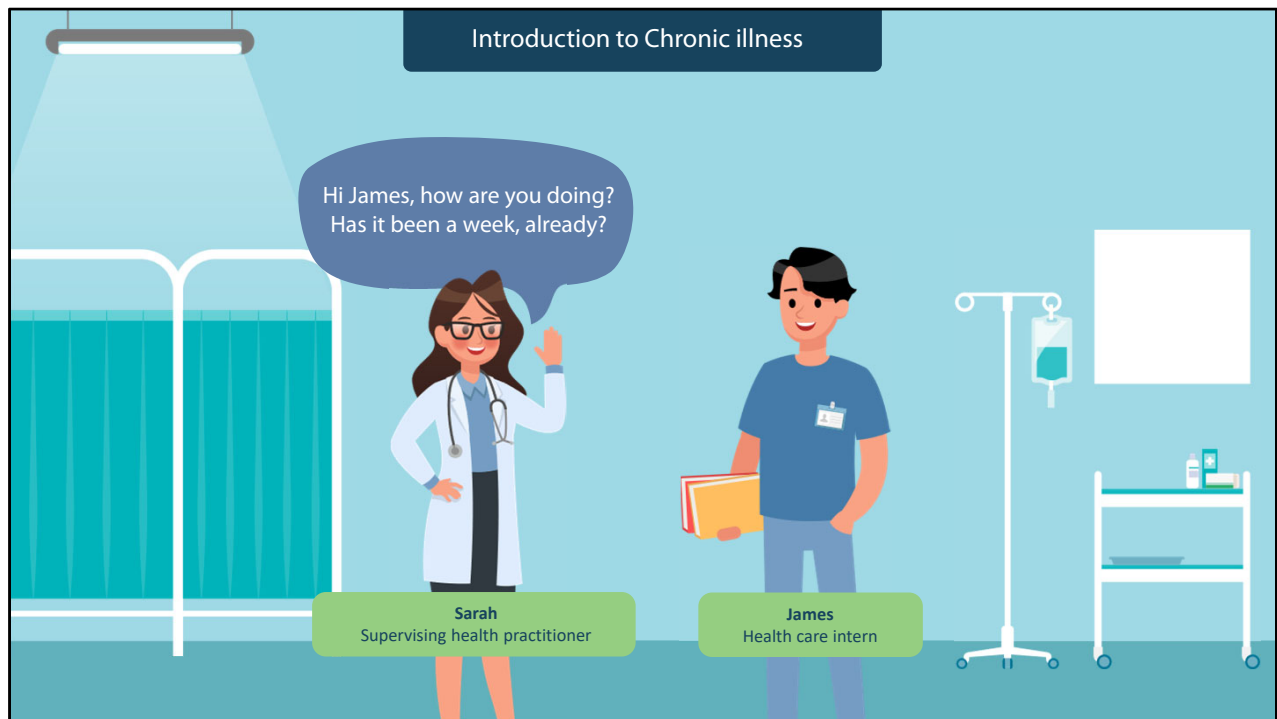
By the end of this module, you will be able to:

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- 6 Apply behavioural change interventions for chronically ill clients
- 7 List the considerations when tailoring interventions
- 8 Describe common coping strategies

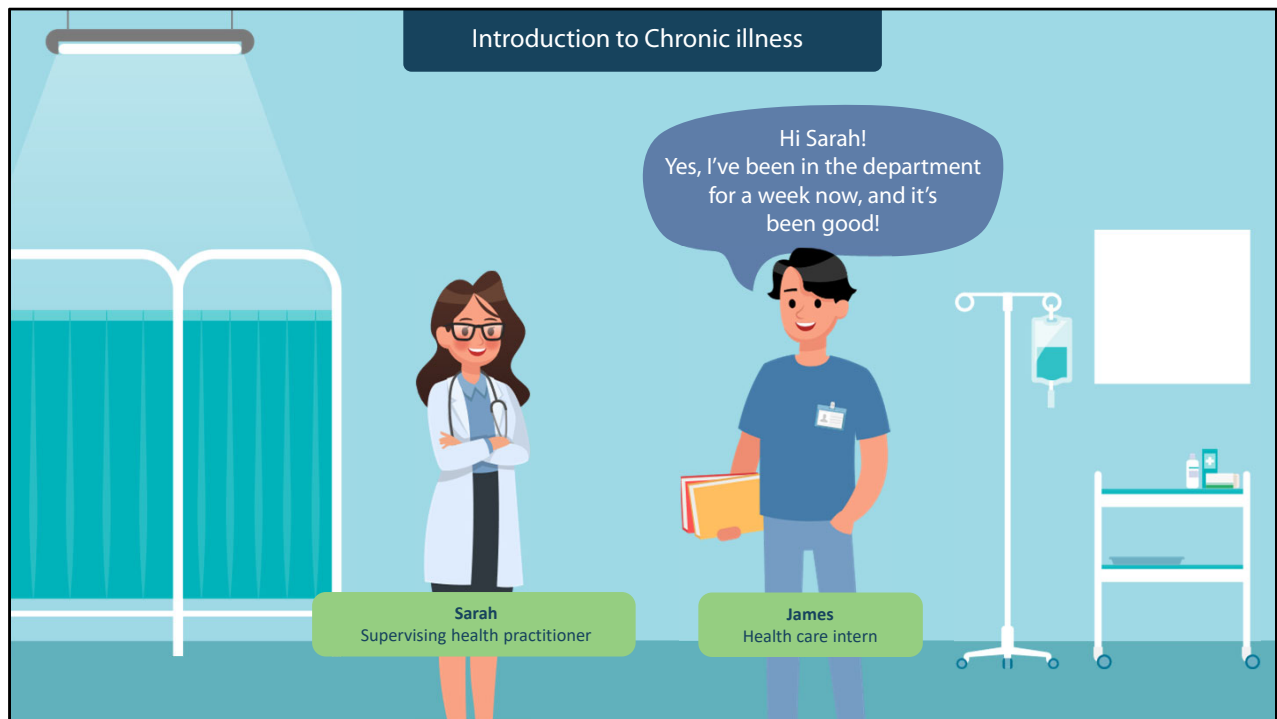


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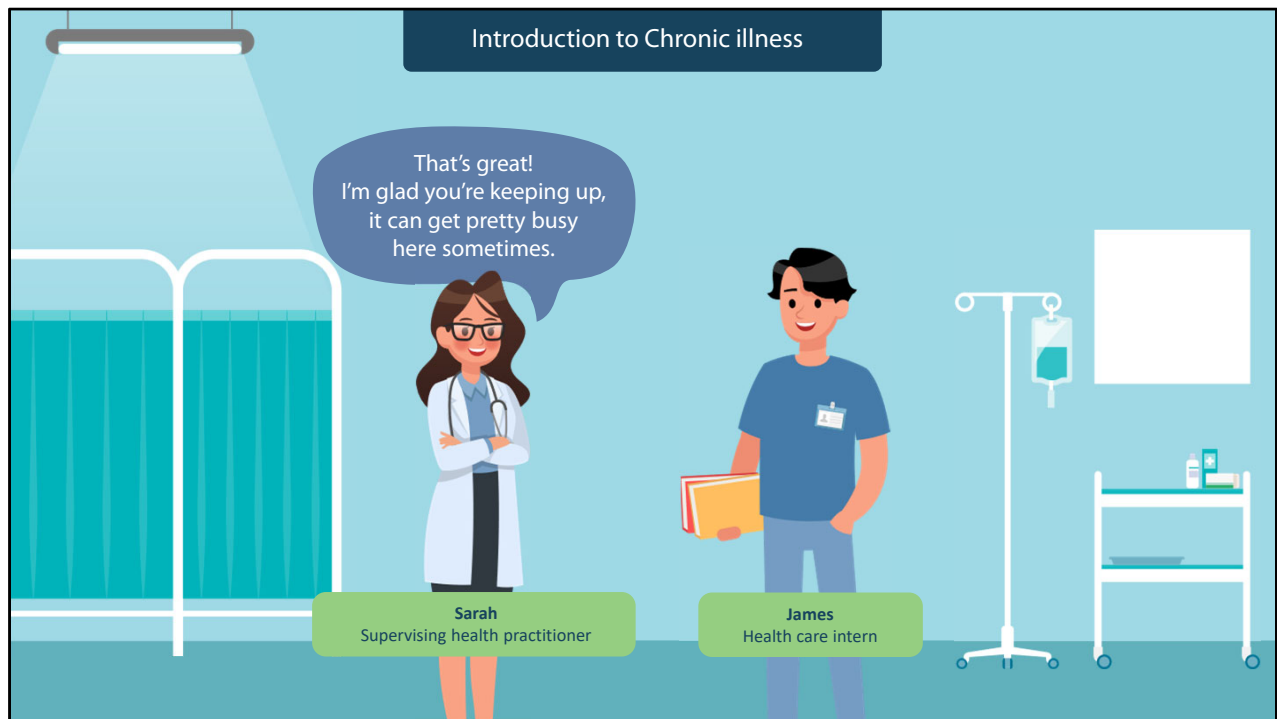




Sarah: Hi James, how are you doing? Has it been a week, already?



James: Hi Sarah! Yes, I've been in the department for a week now, and it's been good!

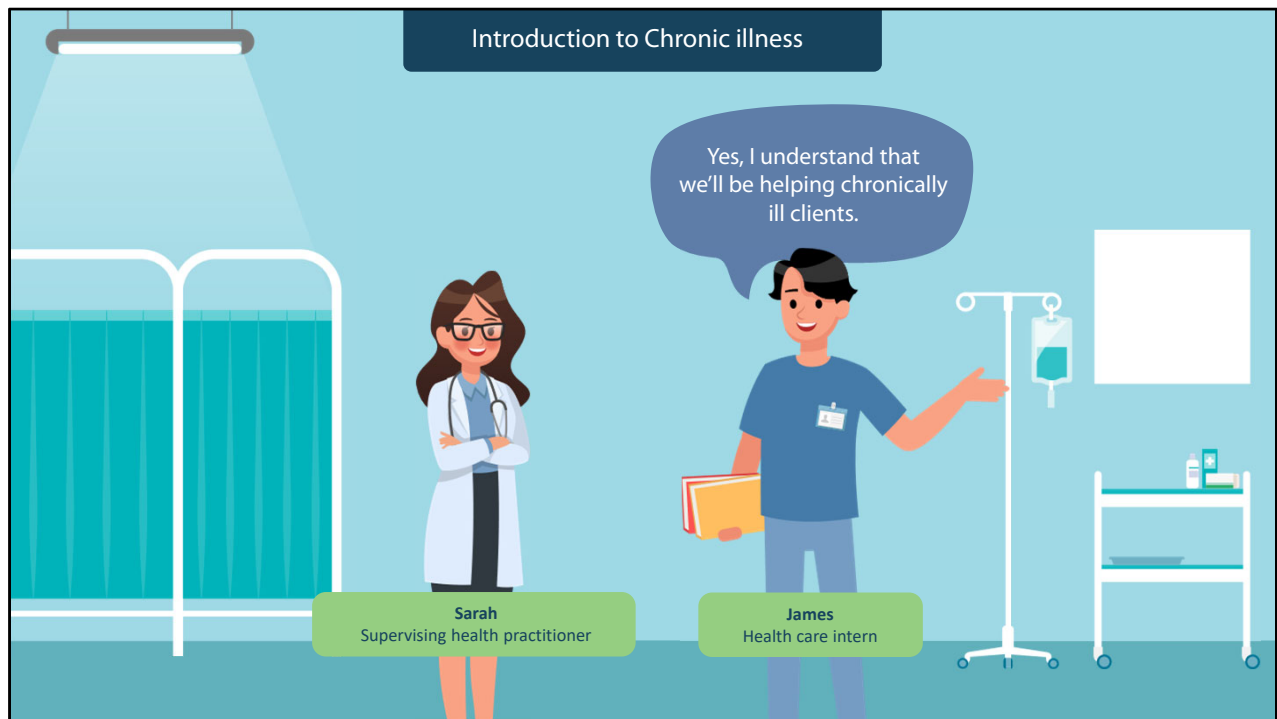


Sarah: (chuckle) That's great! I'm glad you're keeping up, it can get pretty busy here sometimes.

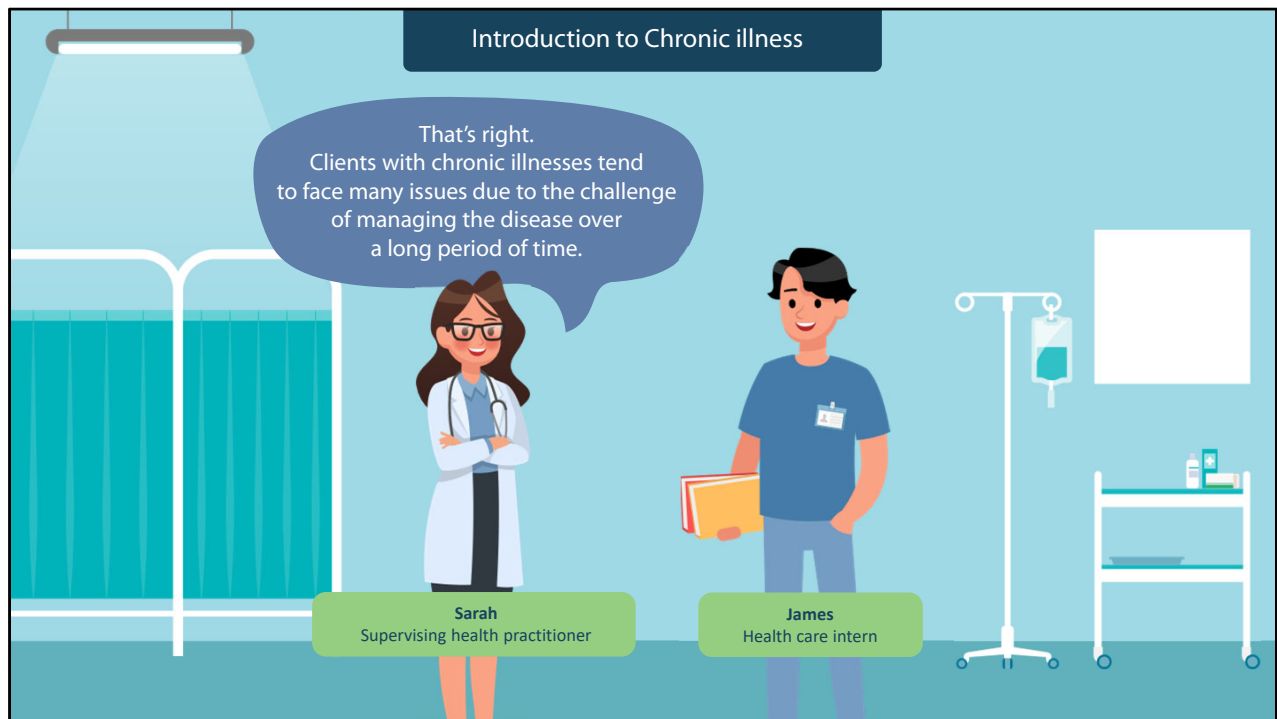


Sarah: Well, today you'll tag along with me and look at how we help clients with behaviour change.

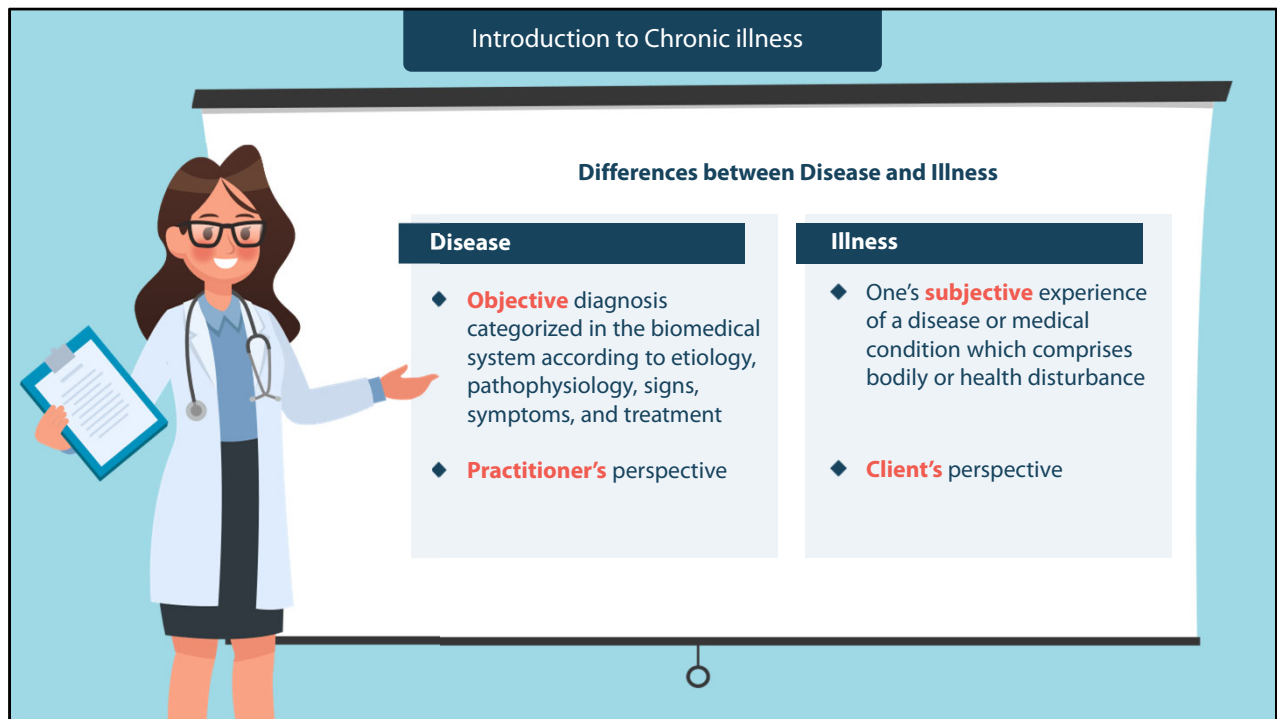




James: Yes, I understand that we'll be helping chronically ill clients.



Sarah: That's right. Clients with chronic illnesses tend to face many issues due to the challenge of managing the disease over a long period of time.

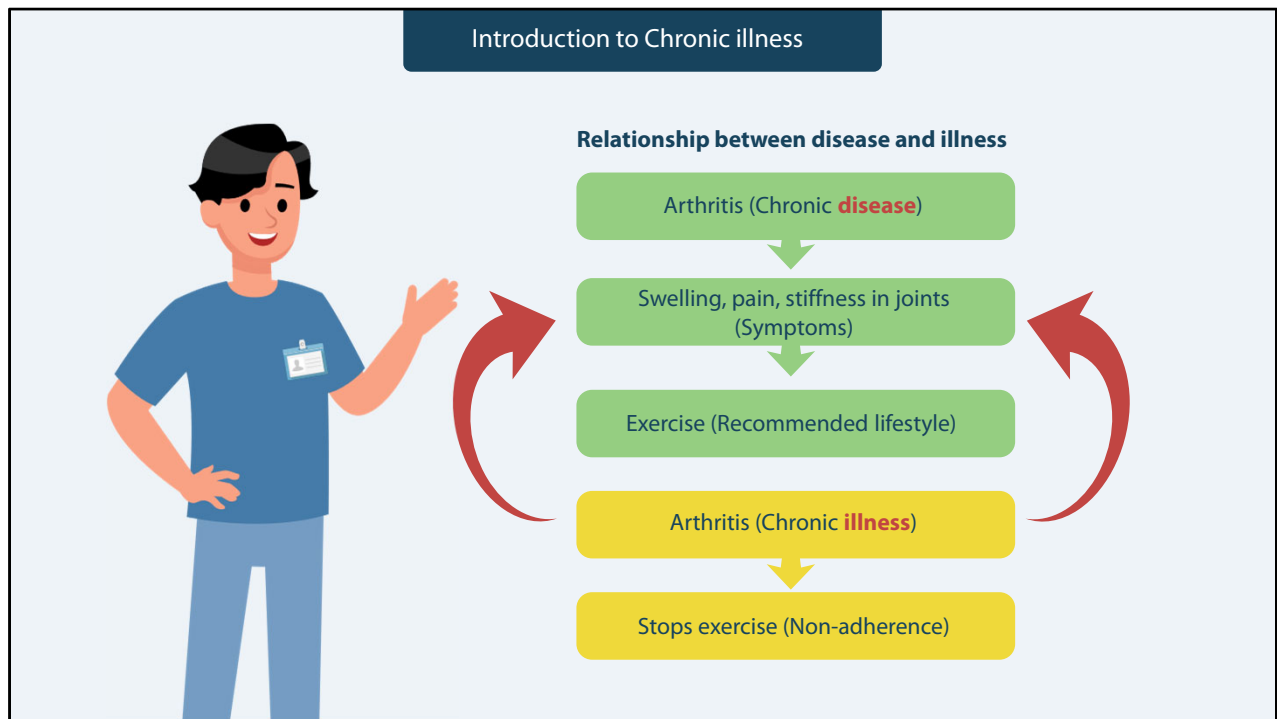


Sarah: You should take note that illness is not the same as disease.

Disease is the **objective** diagnosis of a medical condition, usually from the practitioner's perspective.

Whereas illness is the **subjective** experience of a medical condition, usually from the client's perspective.

Can you give me an example showing the relationship between disease and illness?

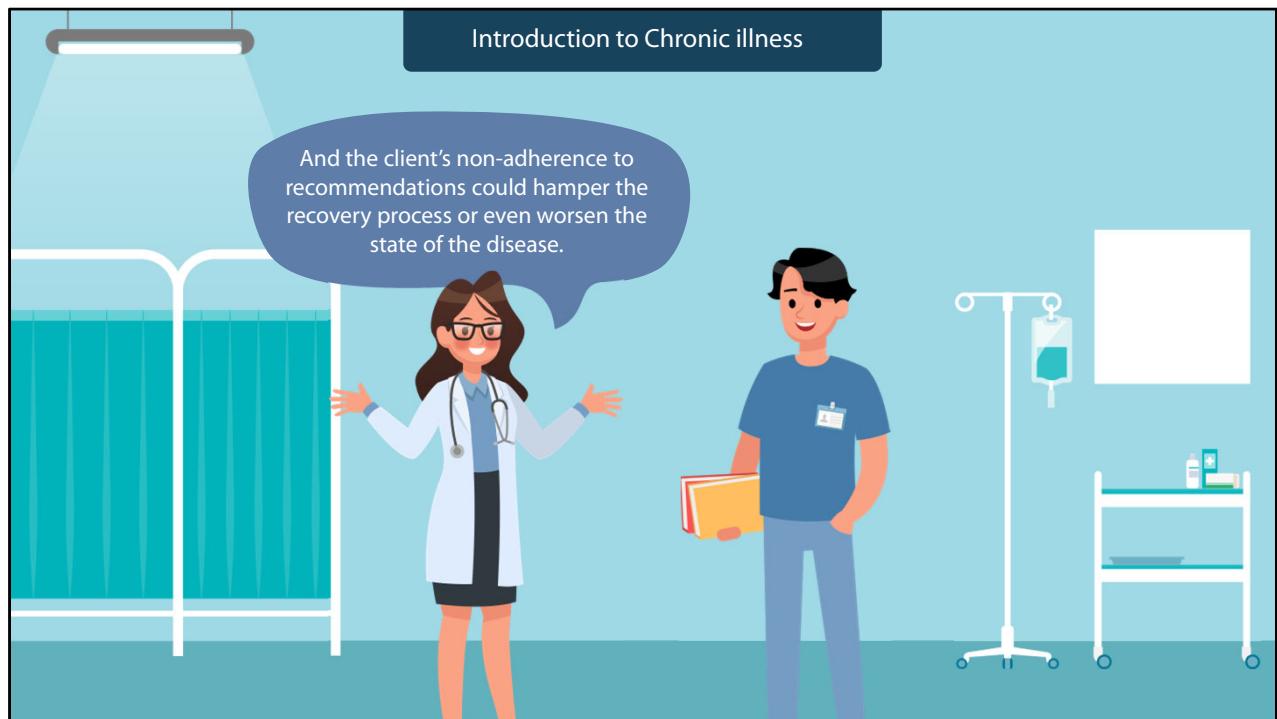


James: Sure! Let me see, hmm... how about this:

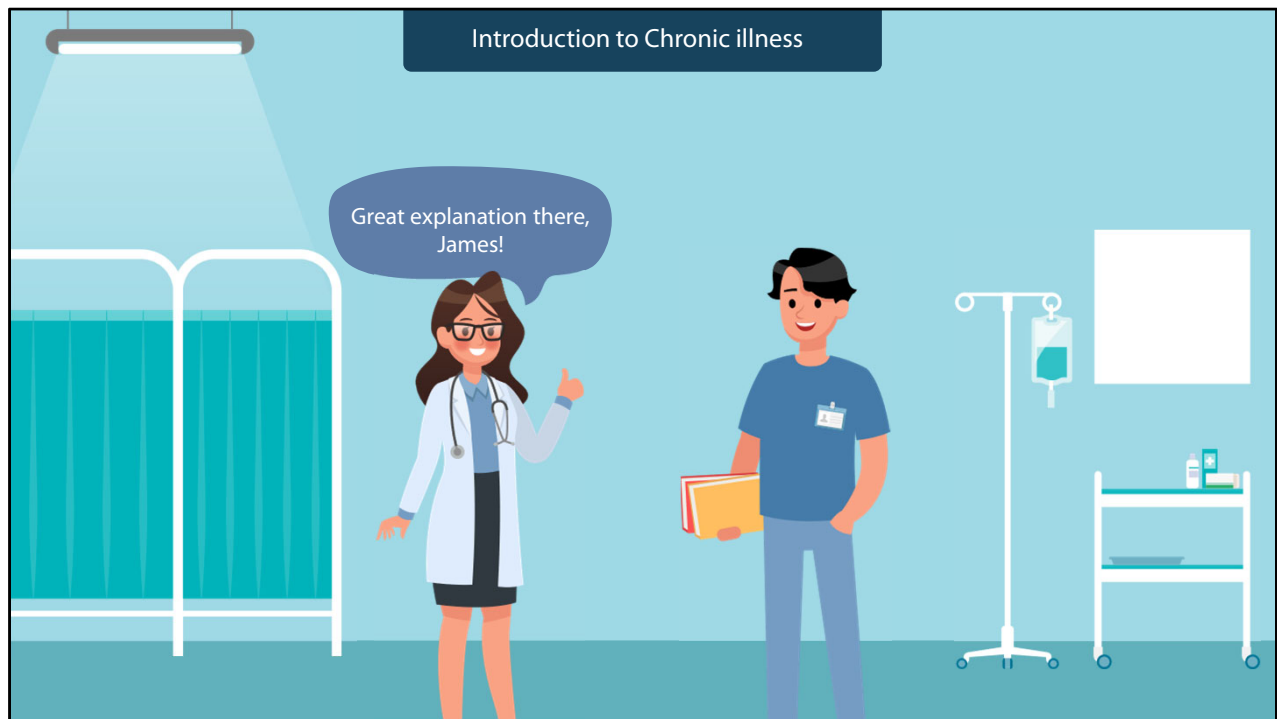
A client has arthritis, which is a chronic **disease**. It causes him swelling, pain and stiffness in his joints.

He is recommended to exercise more to alleviate the swelling and stiffness.

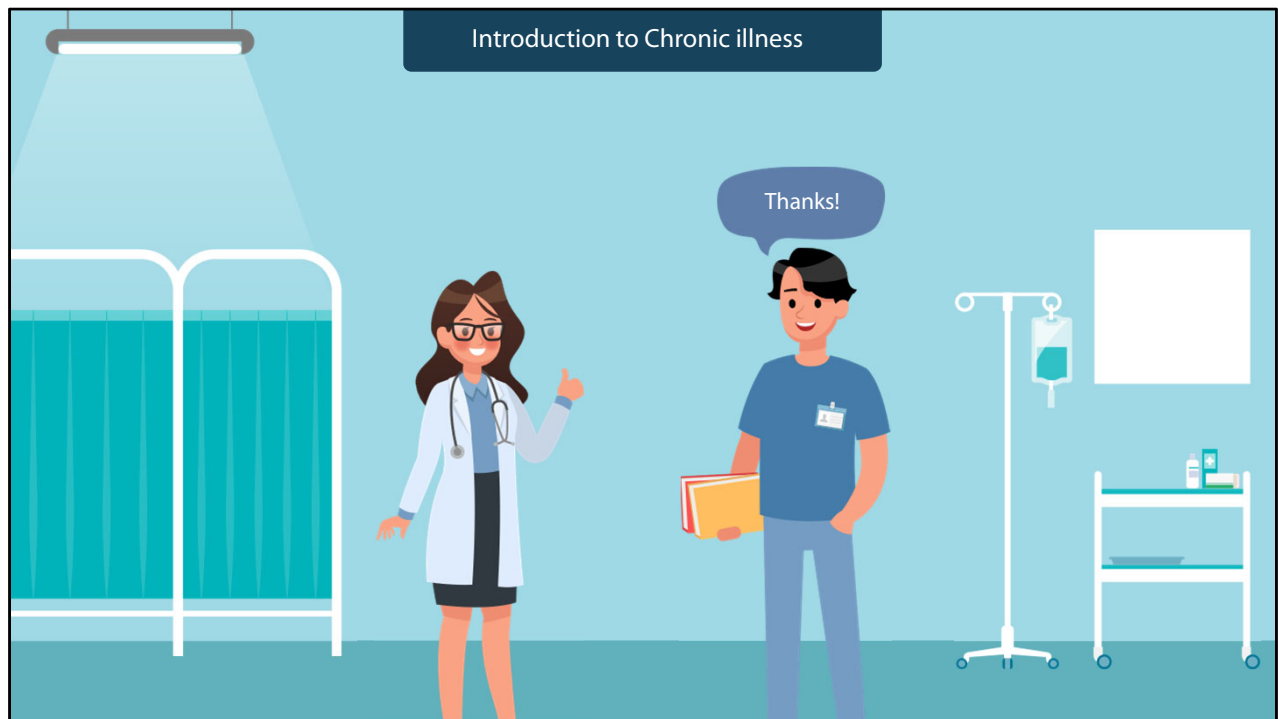
But due to the **illness**, which is his subjective experience of the pain, he stops exercising.



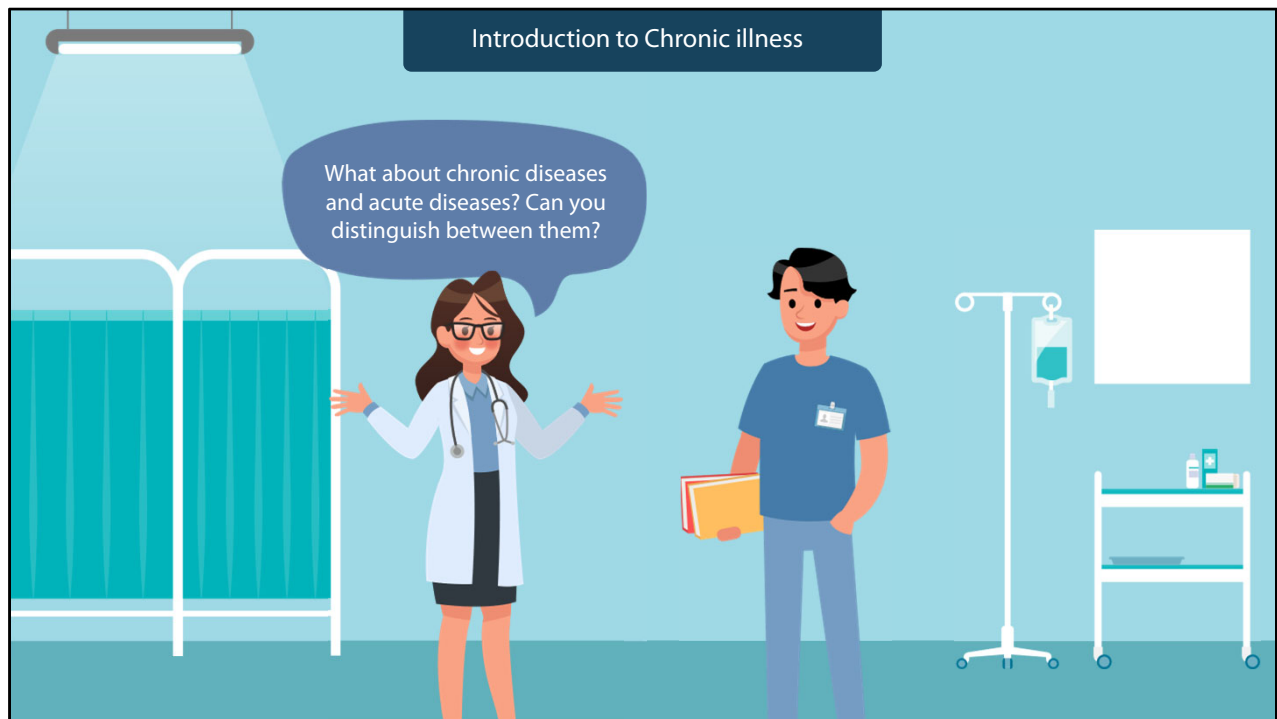
Sarah: And the client's non-adherence to recommendations could hamper the recovery process or even worsen the state of the disease.



Sarah: Great explanation there, James!

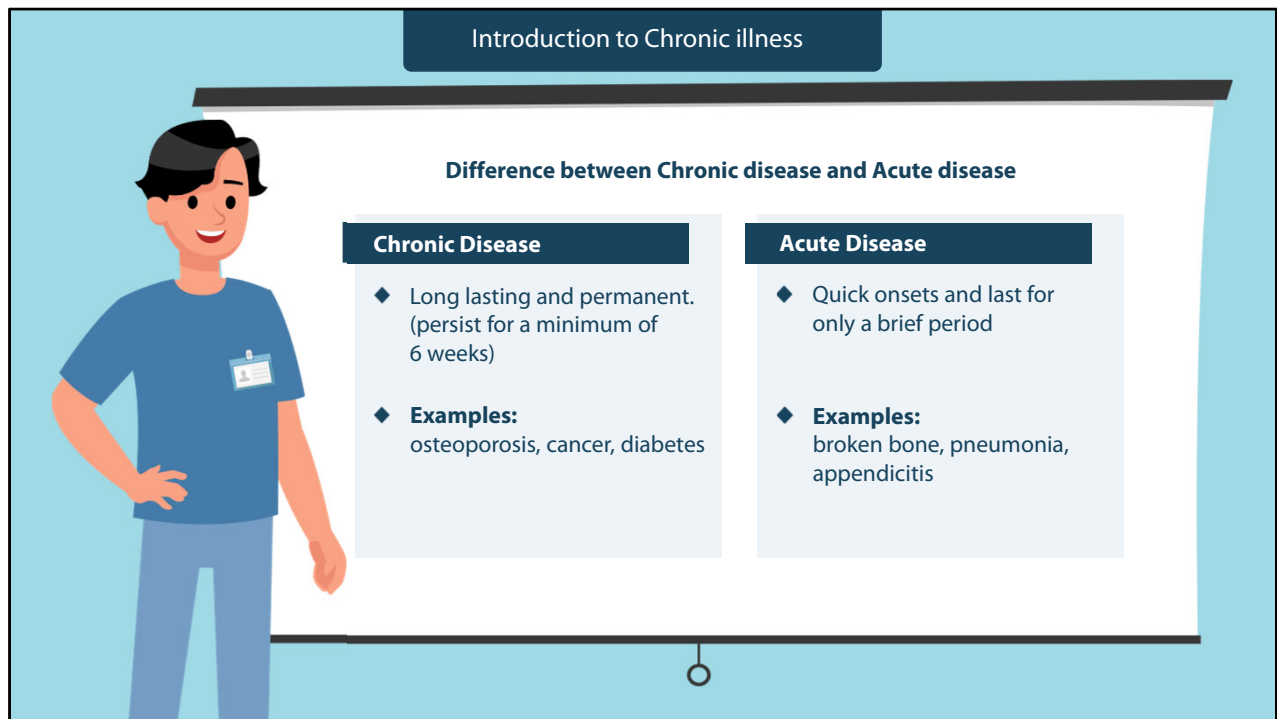


James : Thanks!



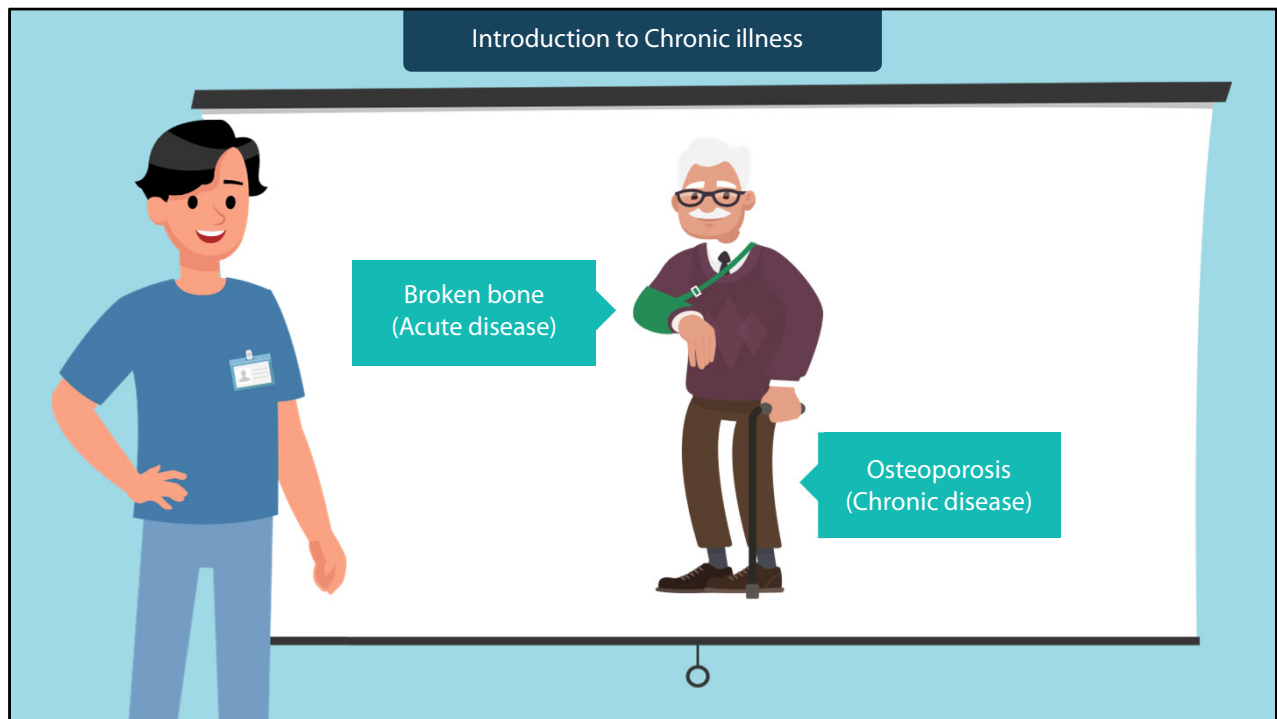
Sarah: What about chronic diseases and acute diseases? Can you distinguish between them?





James: Chronic diseases are generally long lasting and permanent. We'll classify a disease as chronic if it persists for a minimum of 6 weeks. Some common examples are osteoporosis, cancer and diabetes.

Acute diseases, on the other hand, generally last for only a brief period, with quick onsets. Cases like broken bone, pneumonia and appendicitis are all considered acute.



James: Sometimes, acute diseases can be caused by chronic diseases. For example, a client getting broken bones from osteoporosis.



Click the **Quiz** button to edit this object

Which are chronic illnesses?  
Select the answers and submit.

- ☐ Cardiac arrest
- ☐ Cancer
- ☐ Pneumonia
- ☐ Arthritis
- ☐ Epilepsy
- ☐ Appendicitis
- ☐ Asthma
- ☐ Hypertension
- ☐ Diabetes
- ☐ Broken bone



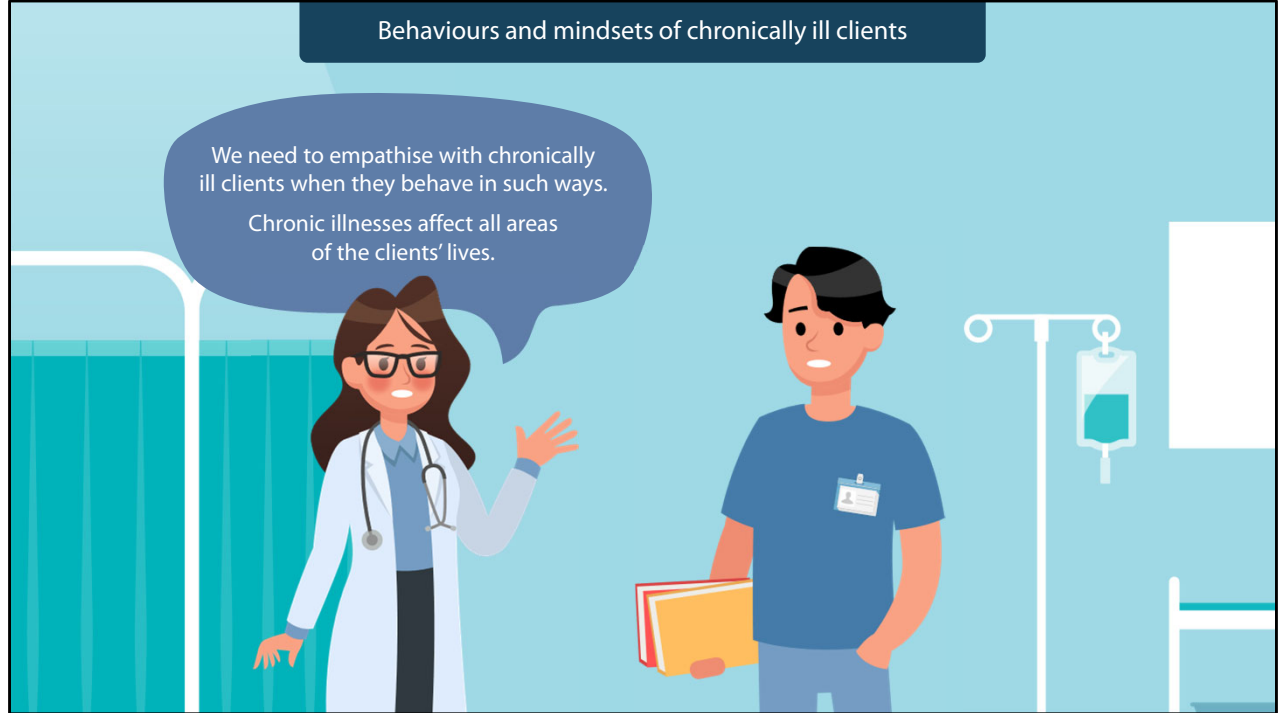
## BEHAVIOURS AND MINDSETS OF **CHRONICALLY ILL CLIENTS**



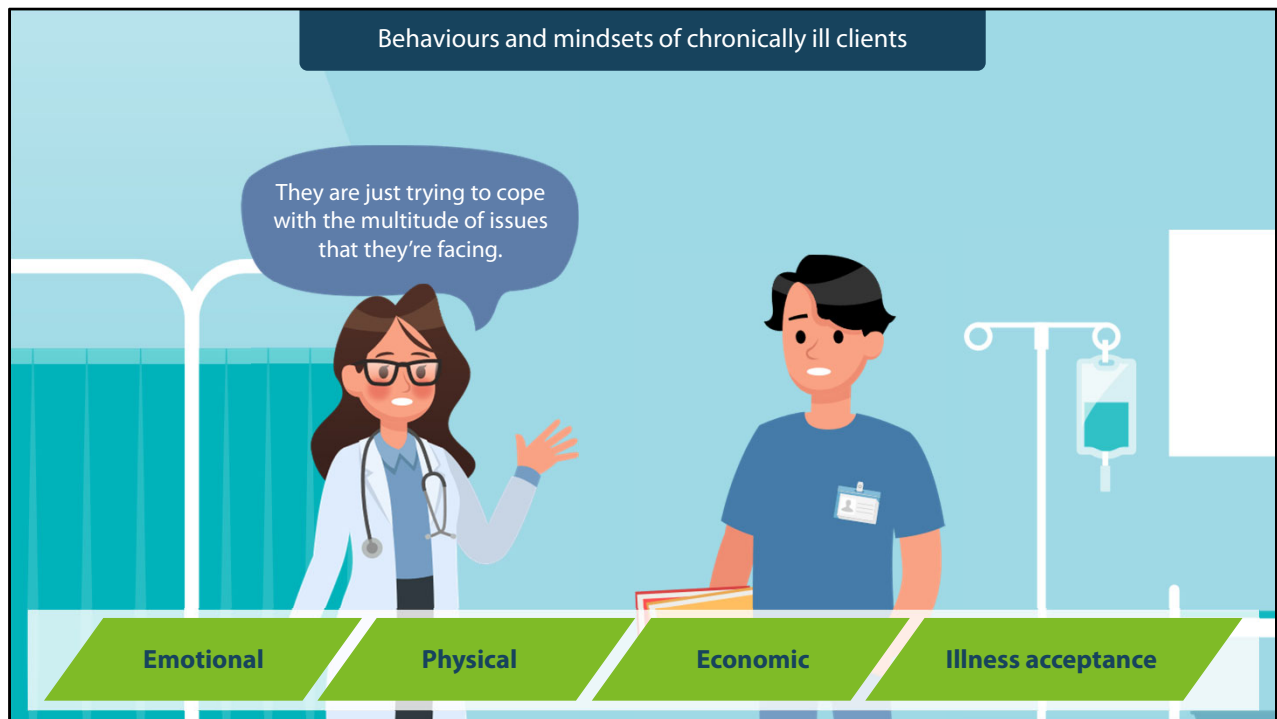
Suddenly, Sarah and James heard a loud crash from behind them. A man was shouting angrily and thrashing the furniture along the hallway. There were a few people trying to calm the man down.



James: Wow, that's quite an outburst...

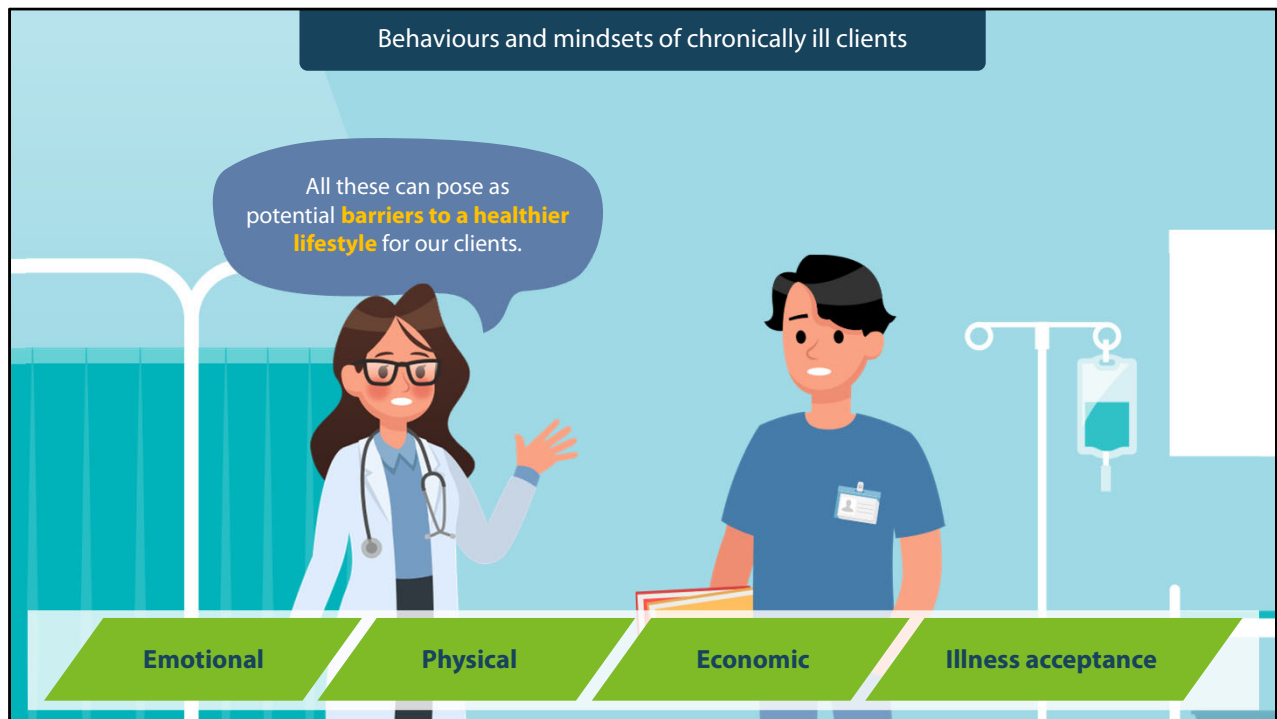


Sarah: We need to empathise with chronically ill clients when they behave in such ways. Chronic illnesses affect all areas of the clients' lives.

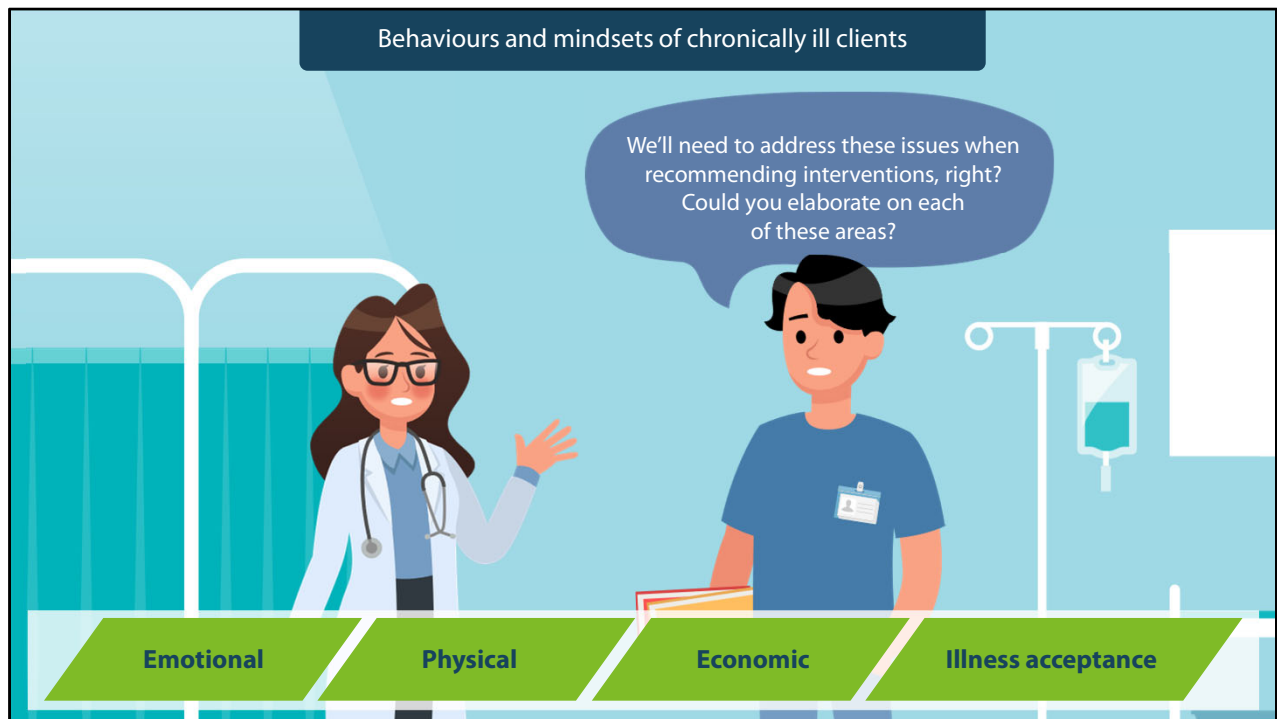


Sarah: They are just trying to cope with the multitude of issues that they're facing. There could be emotional issues, physical issues, economic issues, as well as illness acceptance issues.

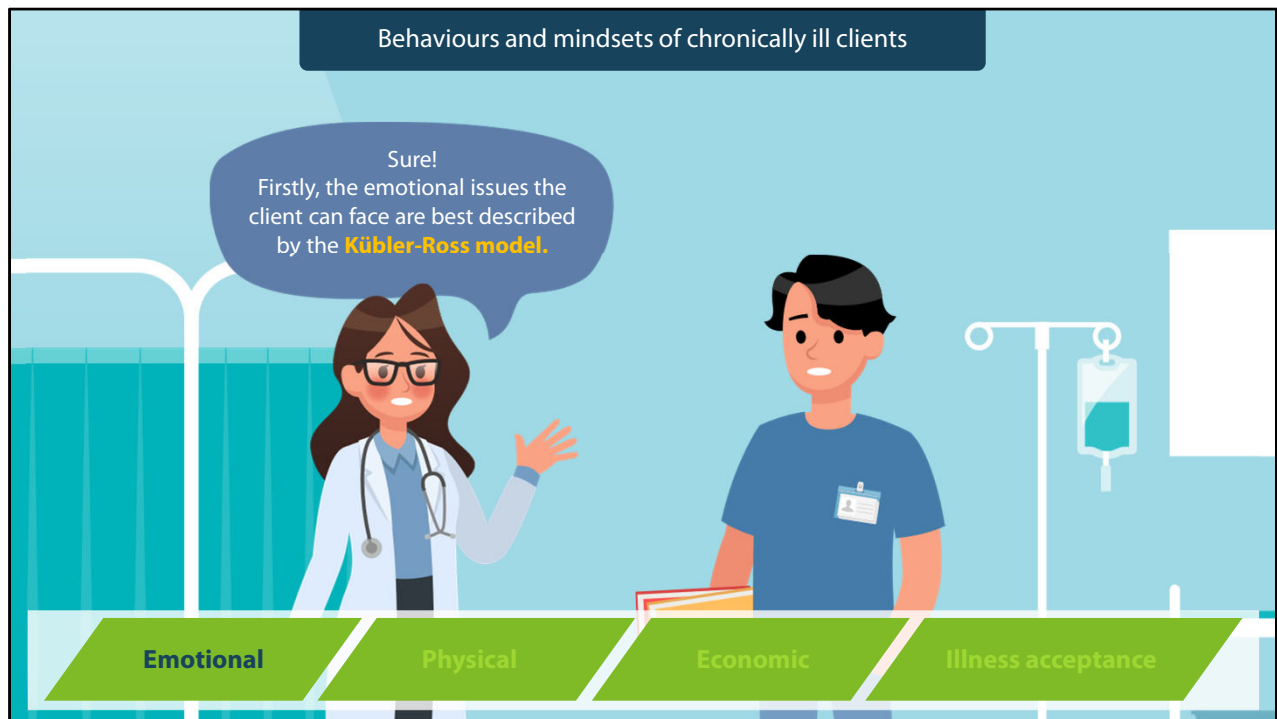




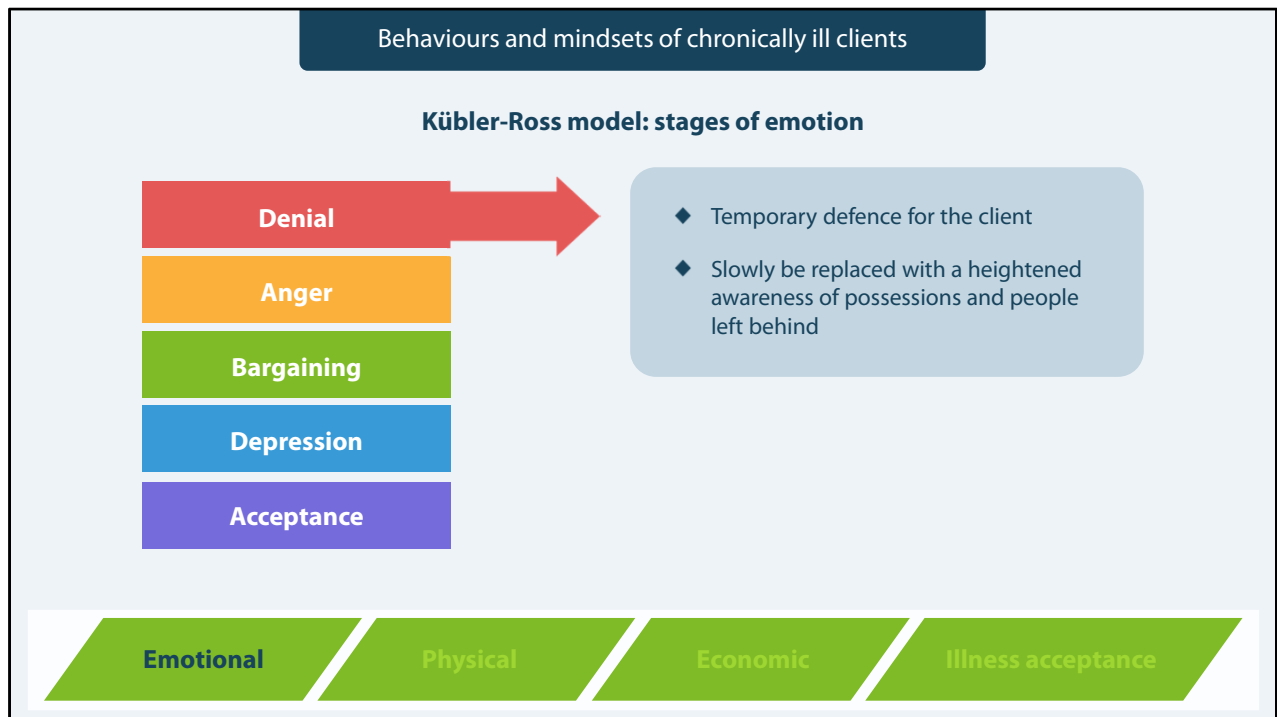
Sarah: All these can pose as potential barriers to a healthier lifestyle for our clients.



James: We'll need to address these issues when recommending interventions, right? Could you elaborate on each of these areas?

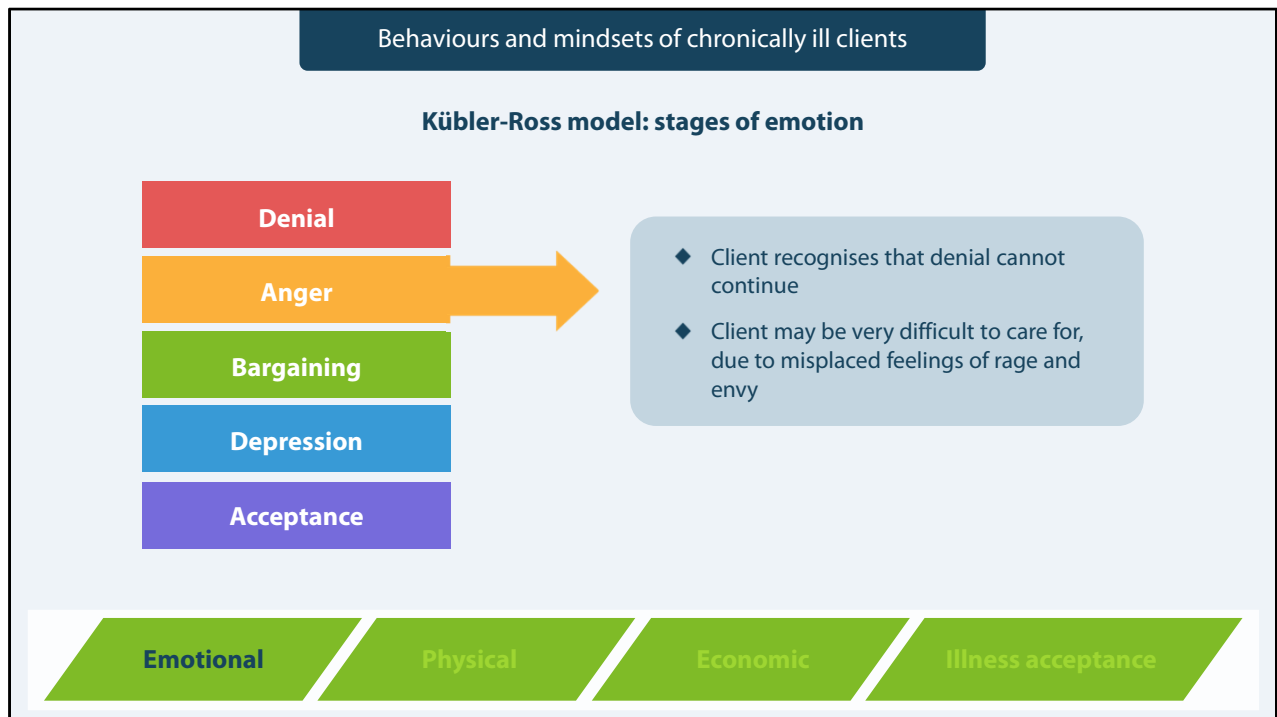


Sarah: Sure! Firstly, the emotional issues that the client can face. These are best described by the Kübler-Ross model.



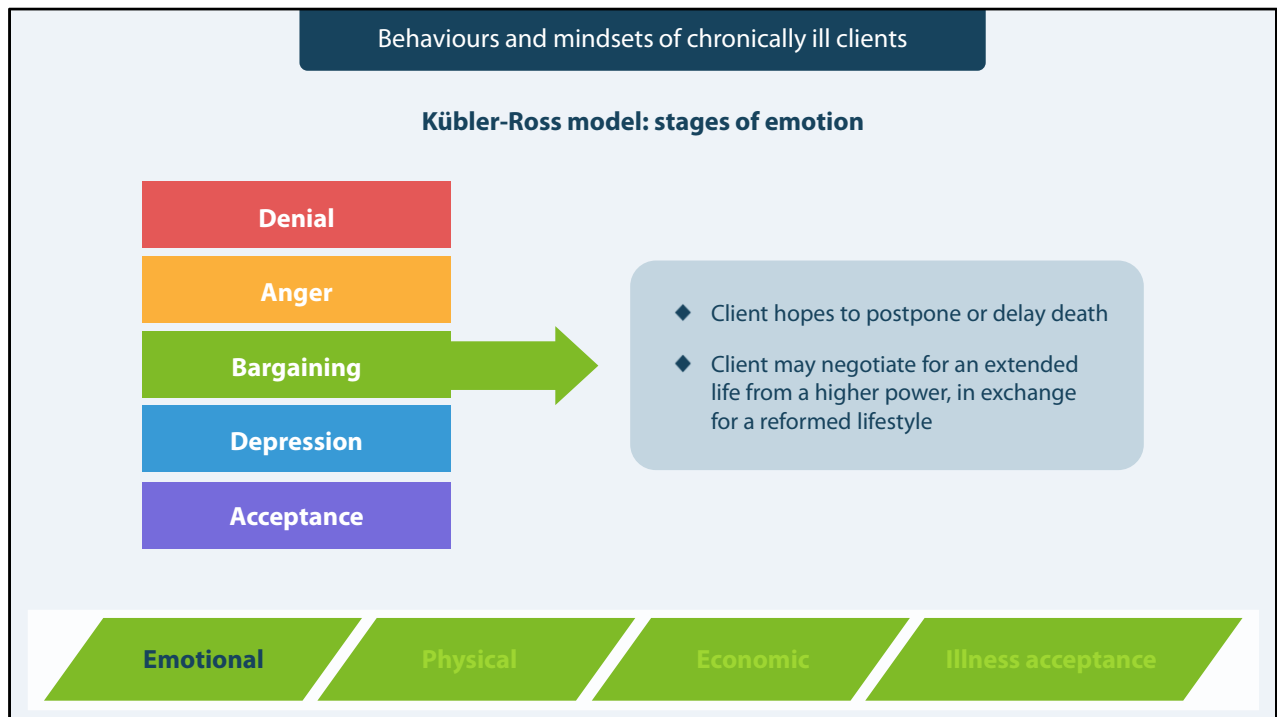
Sarah: In the first stage, there will be a period of denial. This is usually only a temporary defence for the client.

The feeling of denial will slowly be replaced with a heightened awareness of possessions and people left behind after the client's death.

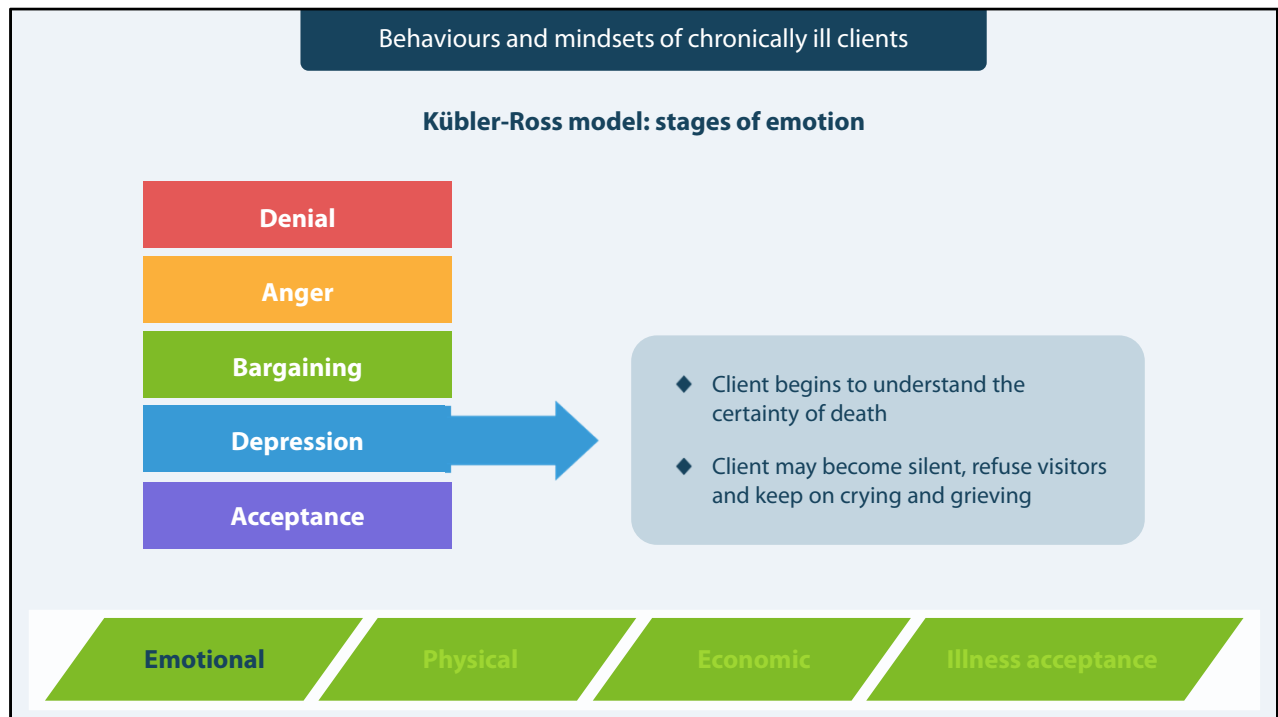


Sarah: The second stage is a period of anger. This comes about when the client recognises that denial cannot continue.

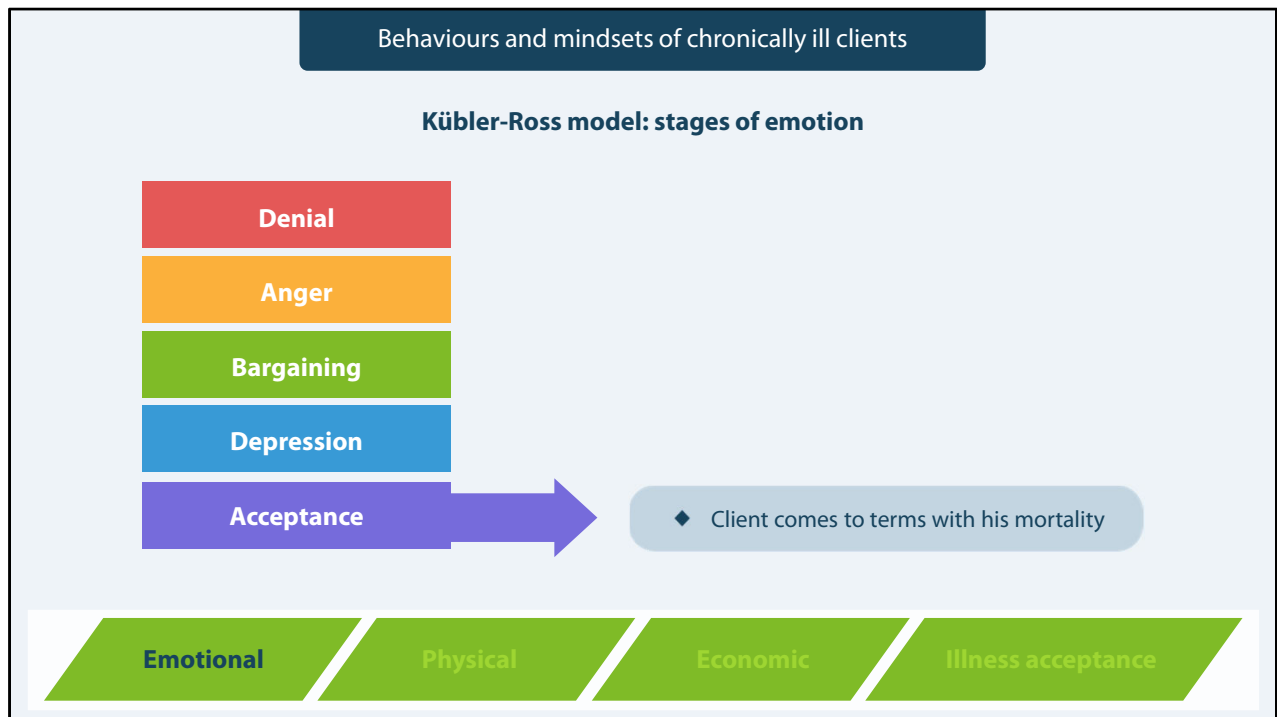
At this stage, the client may be very difficult to care for, due to misplaced feelings of rage and envy.



Sarah: The third stage is that of bargaining. The client hopes that he can somehow postpone or delay death.  
He may negotiate for an extended life from a higher power, in exchange for a reformed lifestyle.

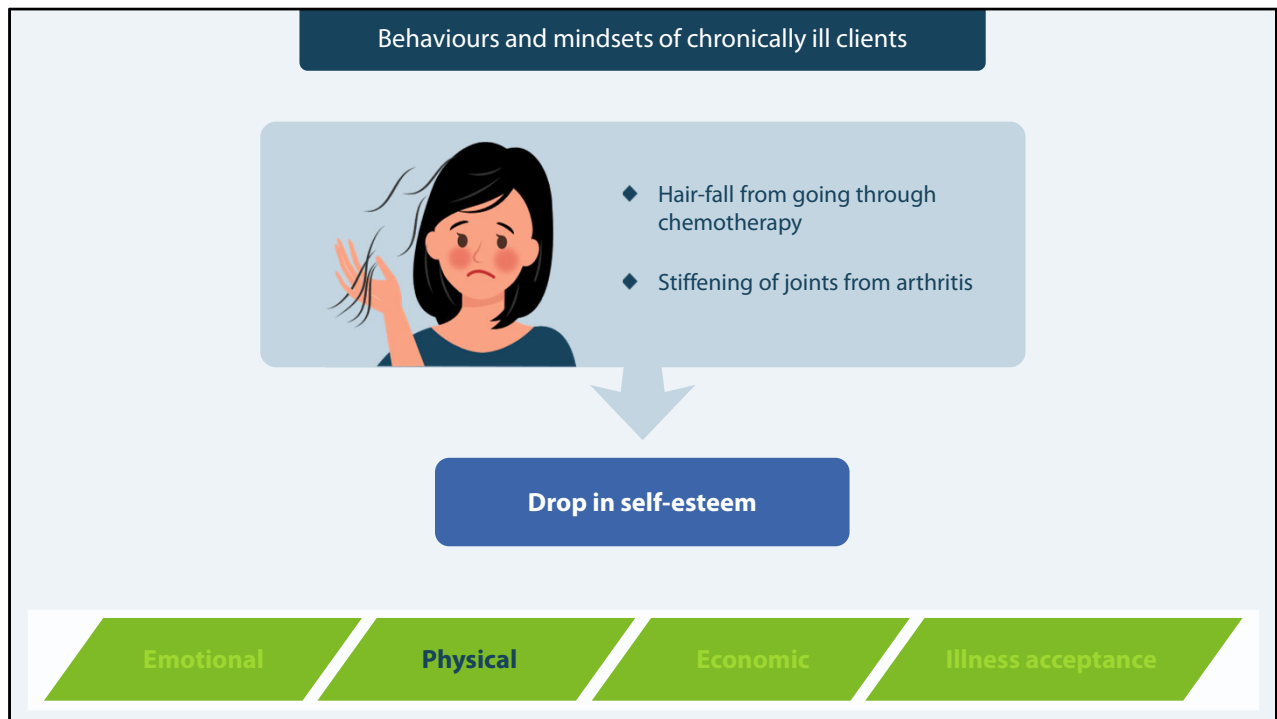


Sarah: The fourth stage is a period of depression. The client begins to understand the certainty of death.  
He may become silent, refuse visitors and keep on crying and grieving.

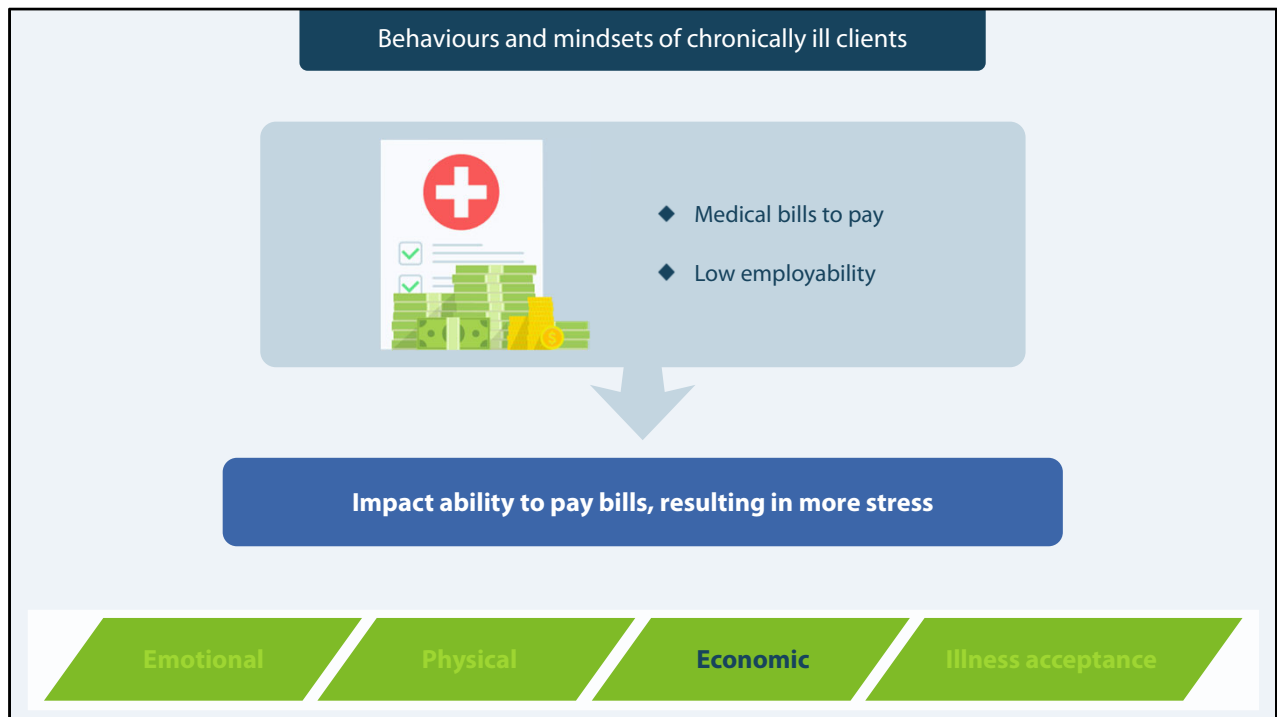


Sarah: The last stage of the Kübler-Ross model is that of acceptance, where the client comes to terms with his mortality.



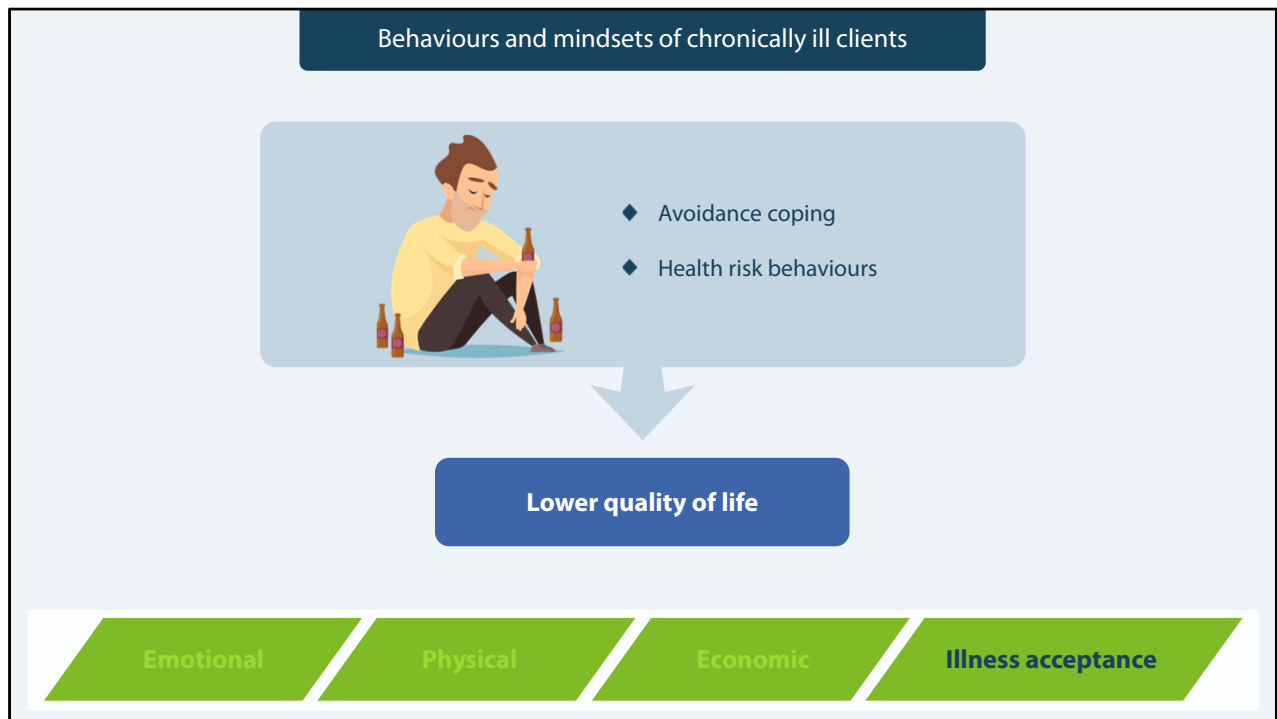


Sarah: Secondly, clients may also face physical issues, such as hair-fall from going through chemotherapy or stiffening of joints from arthritis. These changes to the body of the client could cause a drop in their self-esteem.



Sarah: Thirdly, economic issues will arise as there would be medical bills to pay, on a long-term basis. Due to the chronic disease, clients may also suffer from low employability.

This could further impact their ability to pay the bills, thus creating more stress.



Sarah: Lastly, illness acceptance issues.

When clients find it difficult to accept their illnesses, they could resort to coping methods such as avoidance coping, or engage in health risk behaviours.

Low acceptance of illness generally leads to lower quality of life.

## Behaviours and mindsets of chronically ill clients

### Typical behaviours of chronically ill clients



Emotional outbursts of depression, grief, anger and aggression



Less able to manage emotions and show empathy



Display low self-esteem



Engage in health risk behaviours: substance abuse, unsafe sexual practices, disordered eating etc.

Sarah: The emotional, physical, economic and illness acceptance issues that clients face may result in some typical behaviours from the clients.

They could display more emotional outbursts of depression, grief, anger and aggression, like what we saw along the hallway just now.

Clients could also become less able to manage emotions and show empathy to others.

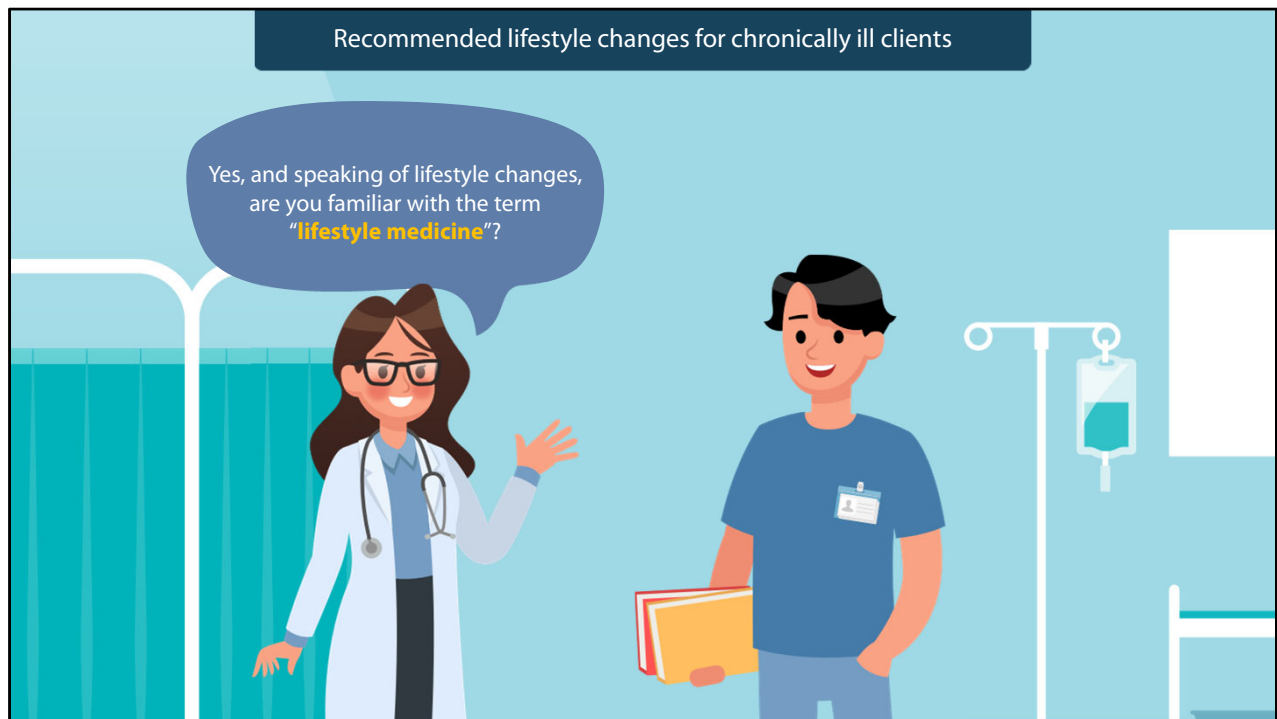
They may show signs of low self-esteem, and they could also engage in health risk behaviours, such as substance use, early onset of sexual activity or unsafe sexual practices, risky driving, violent or suicidal behaviours, antisocial behaviours, and disordered eating.



## RECOMMENDED LIFESTYLE CHANGES FOR CHRONICALLY ILL CLIENTS



James: Thank you, Sarah. Understanding the mindsets and behaviours of chronically ill clients will definitely help in recommending interventions and lifestyle changes for them.



Sarah: Yes, and speaking of lifestyle changes, are you familiar with the term “lifestyle medicine”?

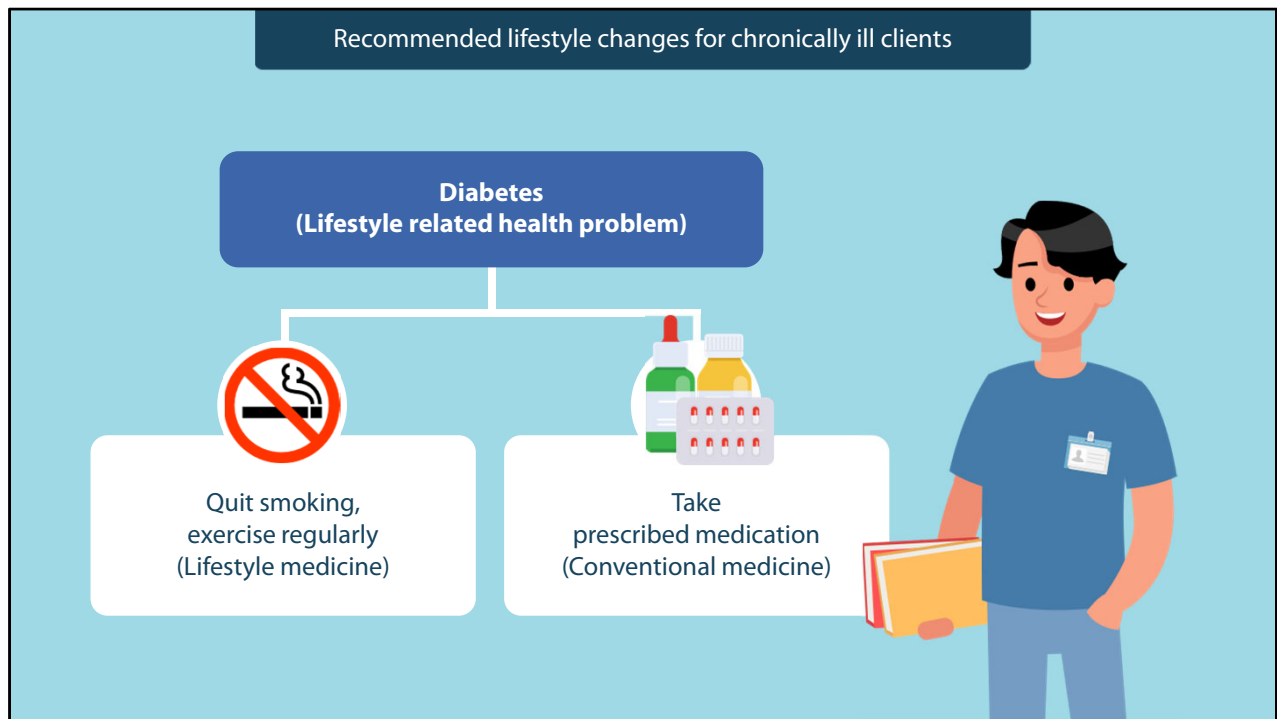
## LIFESTYLE MEDICINE

Application of environmental, behavioural, medical and motivational principles to the management of lifestyle related health problems



James: Oh yes, it is the application of environmental, behavioural, medical and motivational principles to the management of lifestyle related health problems, in a clinical setting.





James: To give an example, say, a client with diabetes, a lifestyle related health problem, could be recommended to quit smoking and exercise regularly, which is a form of lifestyle medicine.

This lifestyle medicine can be recommended on top of taking prescribed medication, which is conventional medicine.



Sarah: Excellent example, James. It's also important to note the differences between conventional medicine and lifestyle medicine.

## Quiz

Click the **Quiz** button to edit this object

Which are characteristics of conventional medicine approach?  
Select the answers and submit.

- ☐ Treats lifestyle causes
- ☐ Client is passive recipient of care
- ☐ Goal is disease management
- ☐ Client required to make big changes
- ☐ Emphasis on diagnosis and prescription
- ☐ Short term treatment

## Recommended lifestyle changes for chronically ill clients

### Comparison of conventional and lifestyle medicine approaches

#### Conventional medicine

- ◆ Treats individual risk factors
- ◆ Client is passive recipient of care
- ◆ Client not required to make big changes
- ◆ Short term treatment
- ◆ Emphasis on diagnosis and prescription
- ◆ Goal is disease management

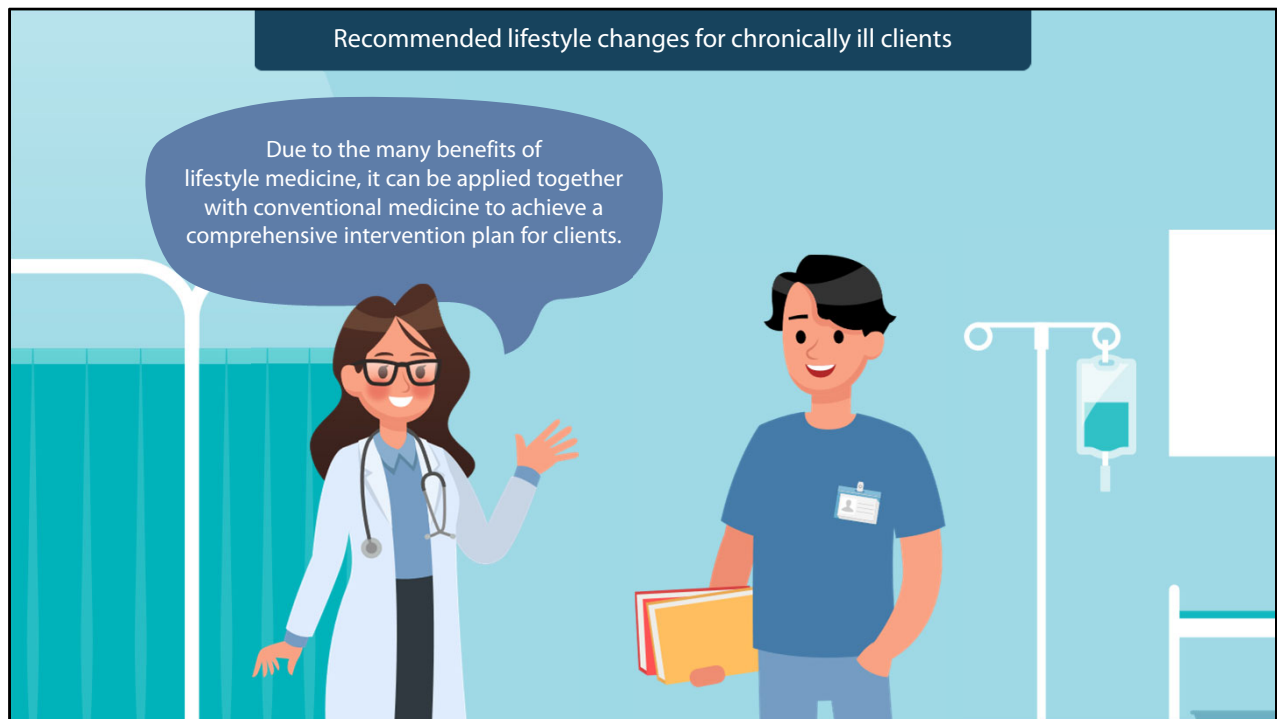


#### Lifestyle medicine

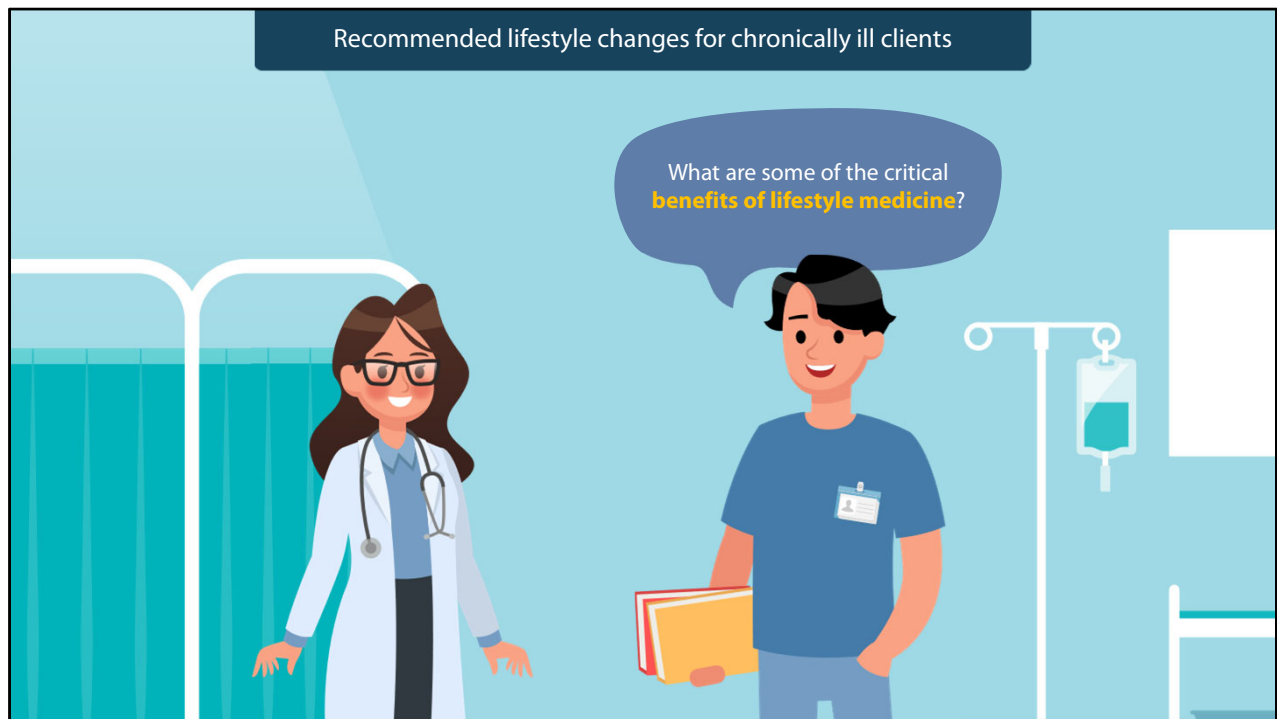
- ◆ Treats lifestyle causes
- ◆ Client is active partner in care
- ◆ Client required to make big changes
- ◆ Long term treatment
- ◆ Emphasis on motivation and compliance
- ◆ Goal is disease prevention



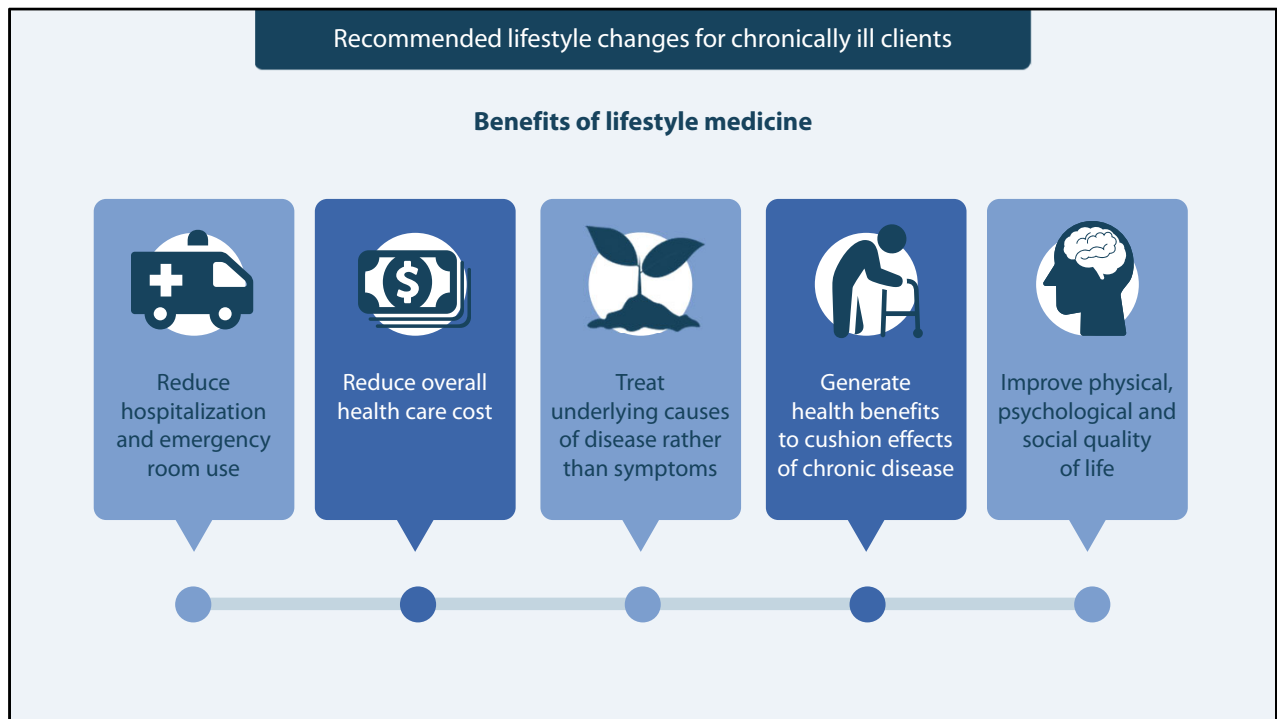
Sarah: Here's a quick comparison table of these two approaches.



Sarah: Due to the many benefits of lifestyle medicine, it can be applied together with conventional medicine to achieve a comprehensive intervention plan for clients.



James: What are some of the critical benefits of lifestyle medicine?



Sarah:

First, it can reduce hospitalization and emergency room use.

Second, overall health care cost can then be reduced.

Third, it treats the underlying causes of disease rather than just the symptoms.

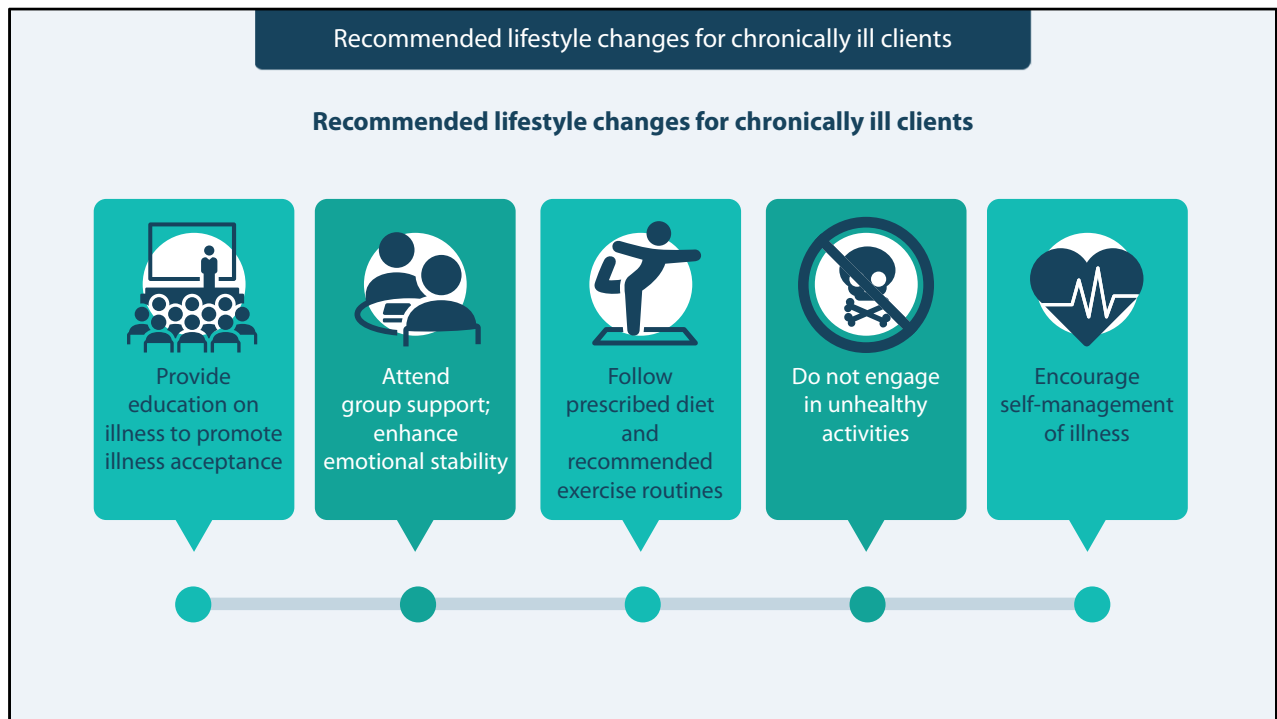
Fourth, it generates health benefits to cushion the effects of the chronic disease.

Finally, it can improve client's physical, psychological and social quality of life.



James: I can see how lifestyle medicine can have a great impact on a client's quality of life. So Sarah, what are some general lifestyle changes that we can recommend to chronically ill clients?





Sarah: Well, for starters, we can provide education on the illness for clients. This can help to promote illness acceptance.

Attending group support may be beneficial to some clients, which may also enhance their emotional stability.

We can also recommend clients to follow prescribed diet and exercise routines, and not engage in unhealthy activities such as substance abuse.

And most importantly, always encourage self-management of illness.



James: What is self-management of illness?

Sarah: Self-management allows clients more control and autonomy over their lives, promoting optimism and a better quality of life.

## Recommended lifestyle changes for chronically ill clients

### Self-management of illness

- ◆ Understand the illness first
- ◆ Learn set of attitudes, behaviours and skills directed towards managing chronic condition



Sarah: Client has to understand the illness first, then learn this set of attitudes, behaviours and skills directed towards managing their chronic condition.

## Recommended lifestyle changes for chronically ill clients

### Self-management of illness



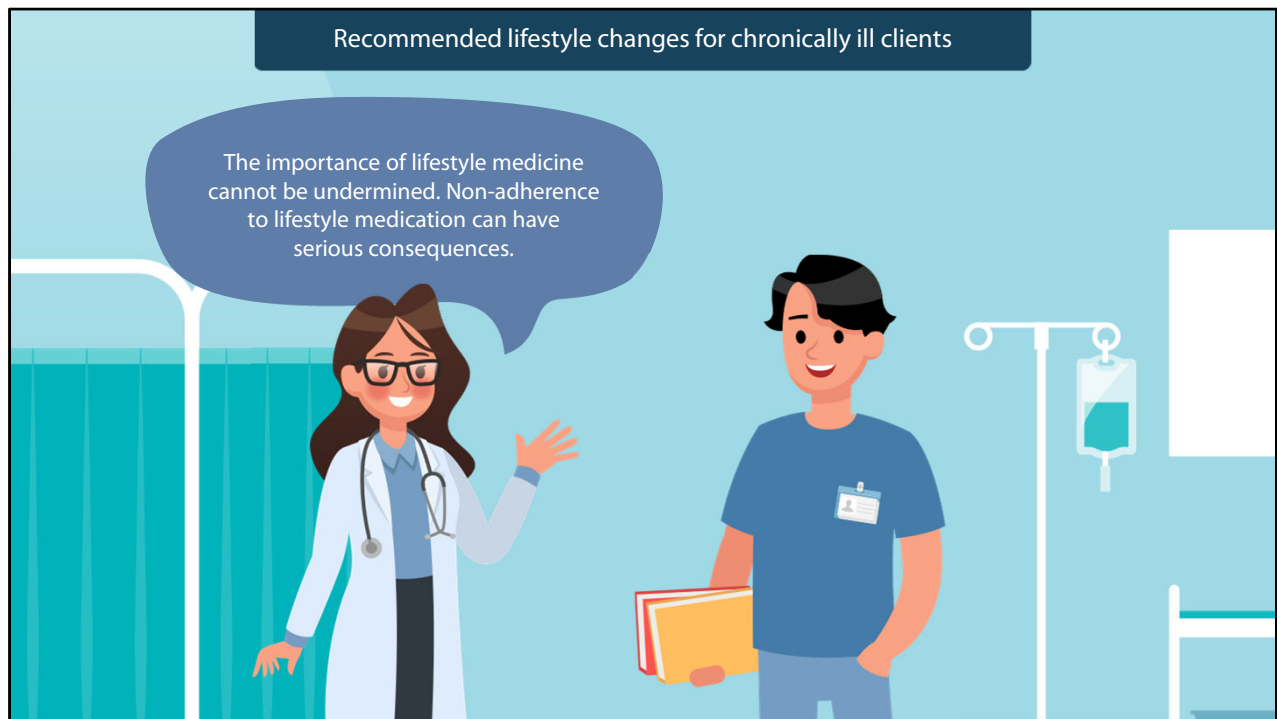
Sarah: Usually, there will be a collaborative decision-making process with health professionals, spouses, carers and other supporters, to come up with and follow a self-management care plan.



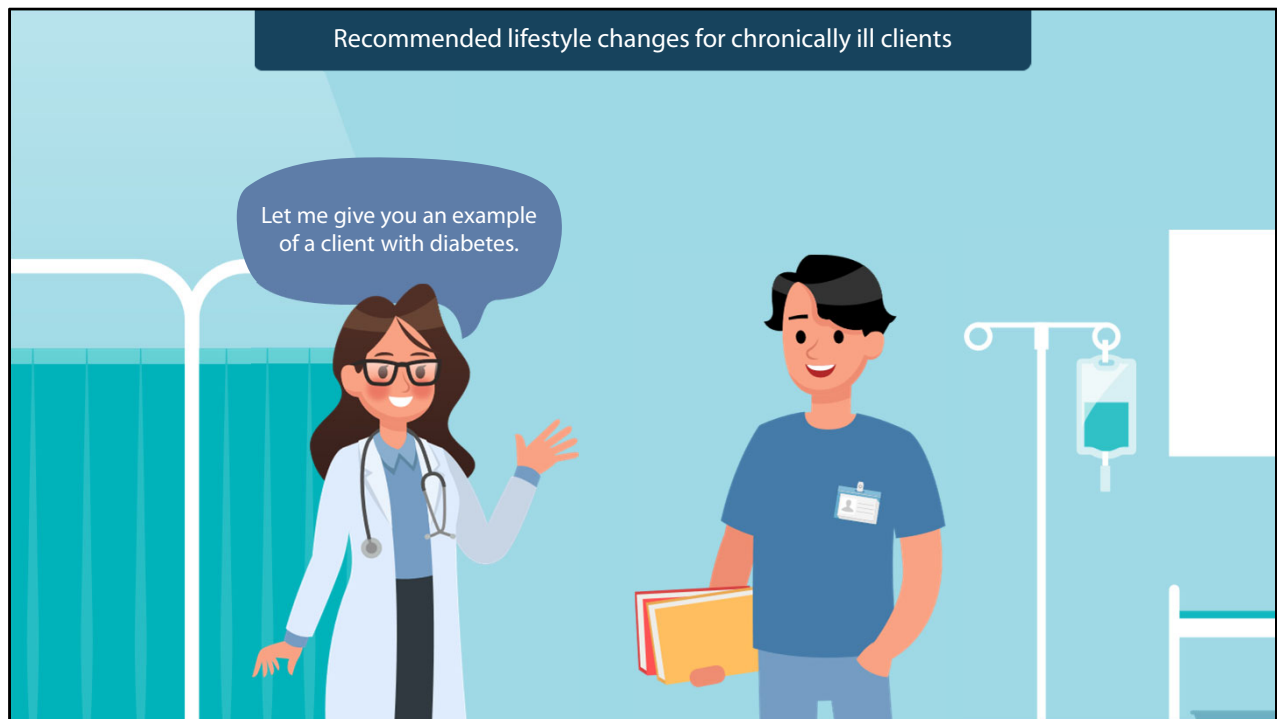
James: A self-management care plan...? What does it do?

Sarah: This plan will help the client to:

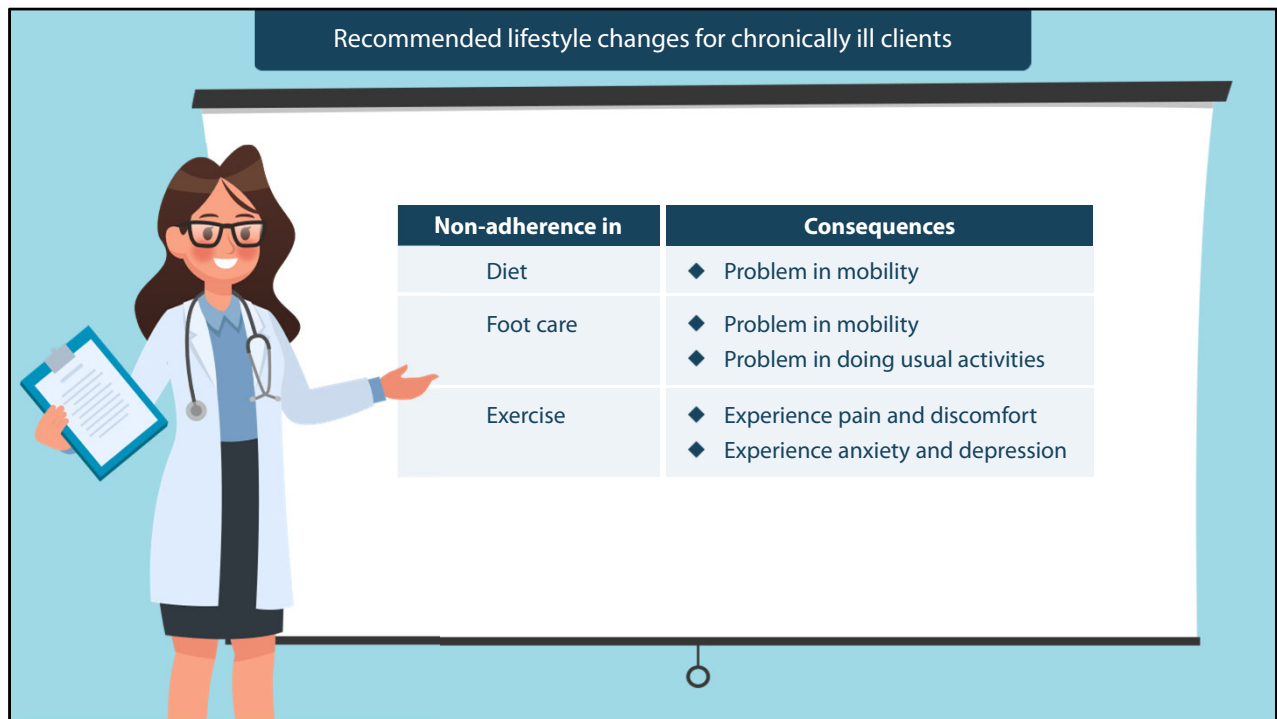
- Monitor and manage signs and symptoms of the illness;
- Manage the impact of the illness on physical, emotional, occupational and social functioning aspects;
- Adopt healthier lifestyles, by addressing risk factors and focusing on prevention and early intervention;
- And access support services with confidence.



Sarah: The importance of lifestyle medicine cannot be undermined.  
Non-adherence to lifestyle medication can have serious consequences.



Sarah: Let me give you an example of a client with diabetes.



Sarah: When the client does not adhere to the recommended diet, problems in mobility could arise.

Non-adherence in foot care could result in problems in mobility, as well as problems in doing usual activities.

When the client does not exercise regularly, he could experience pain and discomfort, even have feelings of anxiety and depression.



A row of six wooden blocks on a thin metal rod. The first four blocks are upright and show the letters C, H, A, and N in black. The fifth block is tilted forward, showing a red 'G' on top and a black 'C' on the front face. The sixth block is upright and shows the letter E in black.

**C H A N G E**

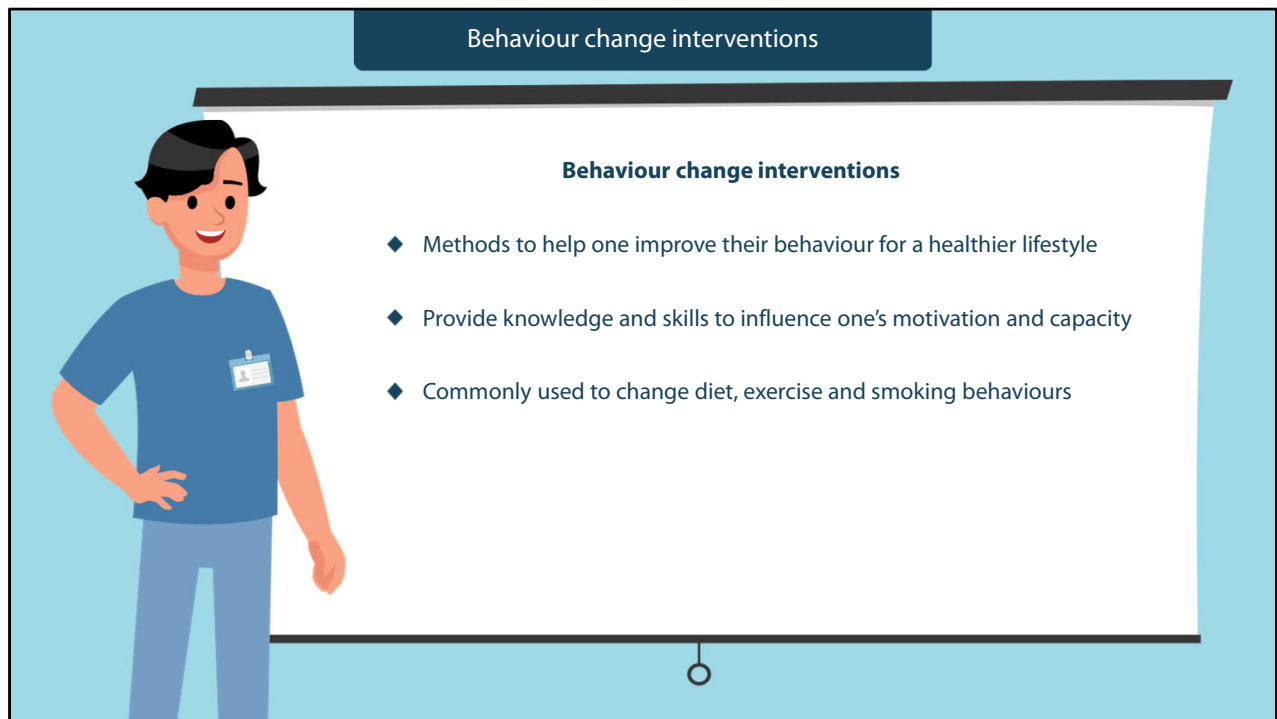
**BEHAVIOUR CHANGE  
INTERVENTIONS**



Sarah: We've talked quite a bit about lifestyle medicine and its advantages, but do you know what else could be done to help chronically ill clients to manage their illnesses?



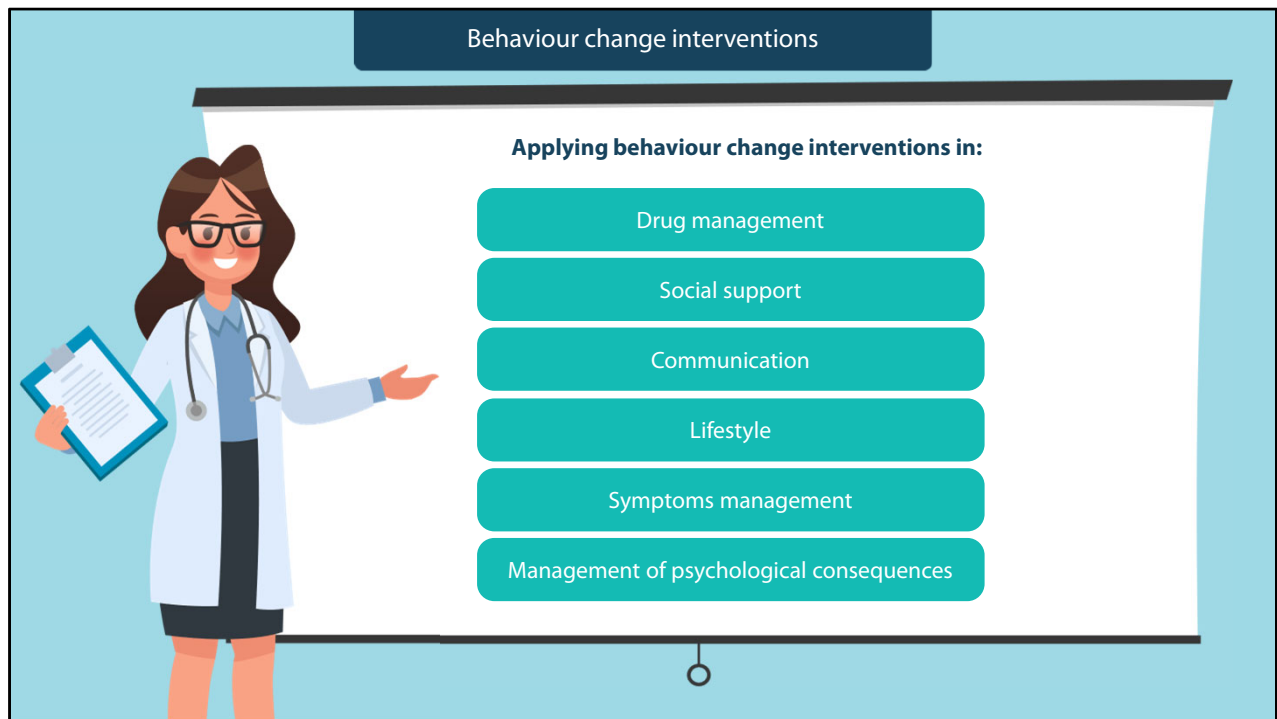
James: Cognitive behavioural therapy could also be recommended to help manage uncertainty in clients' lives.



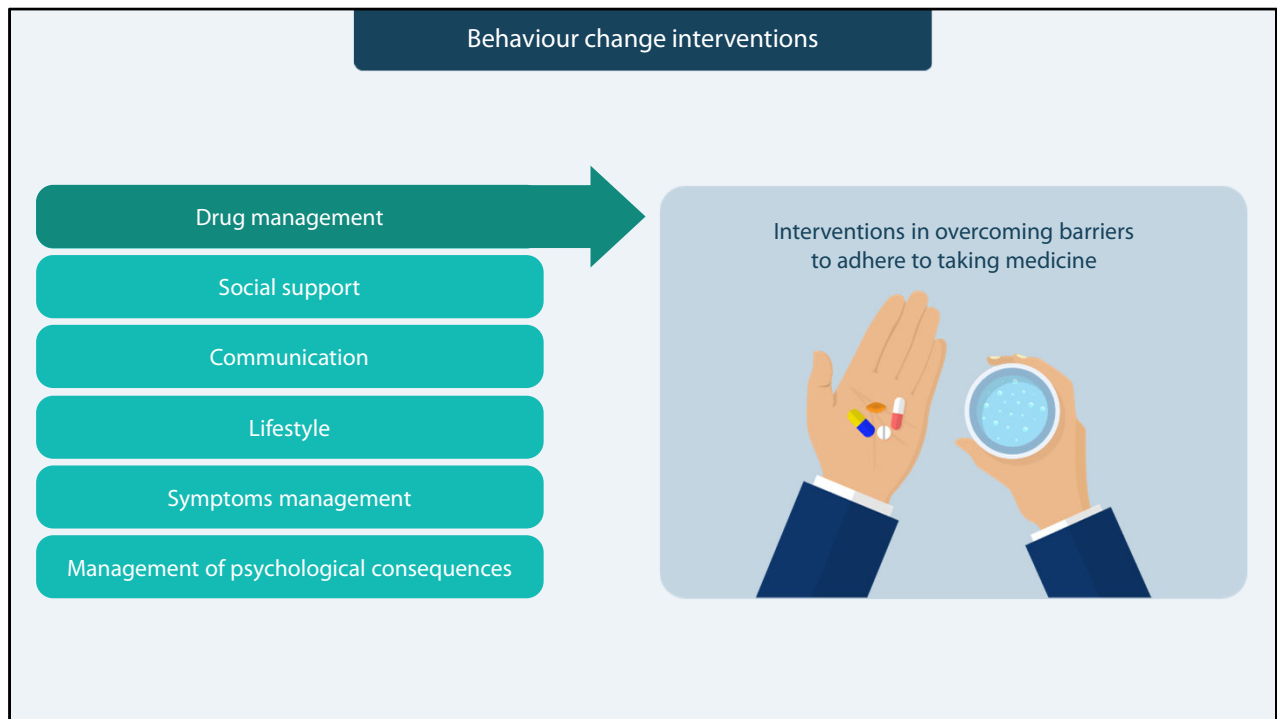
James: These interventions are methods to help one improve their behaviour for a healthier lifestyle.

They provide knowledge and skills to influence one's motivation and capacity, so as to bring about a change in behaviour.

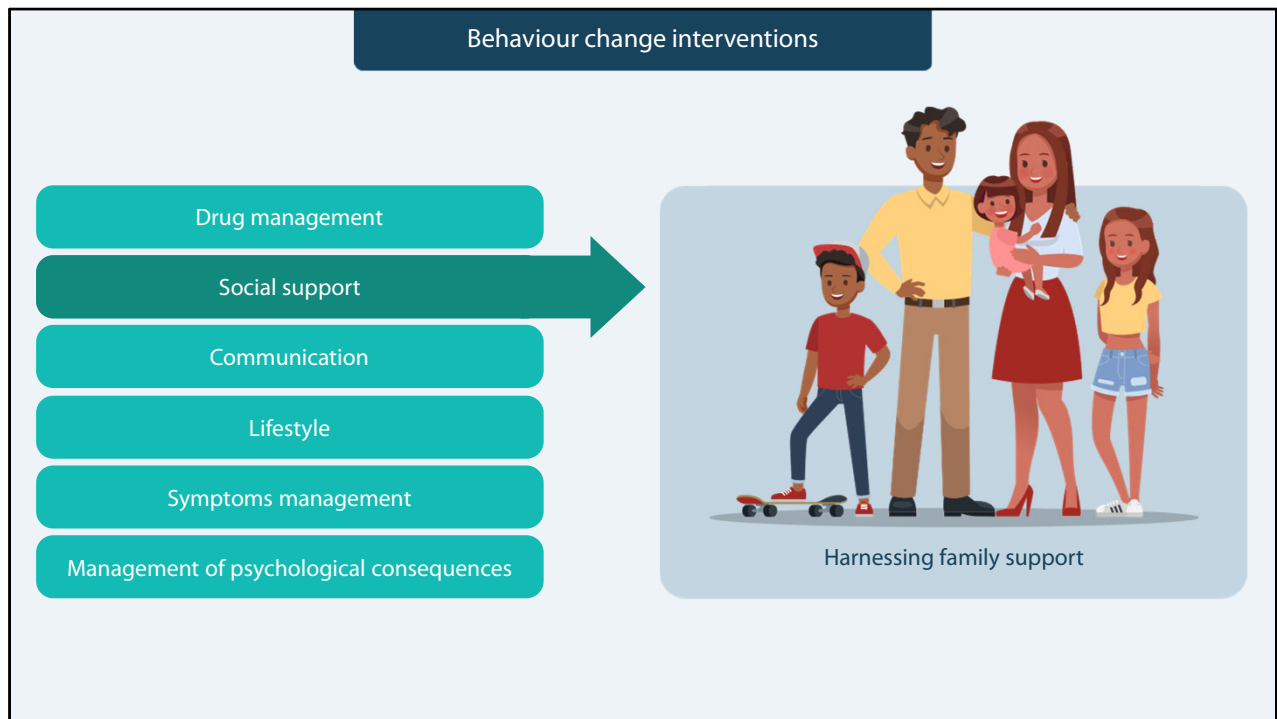
Some common health behaviours that can be changed are related to diet, exercise and smoking.



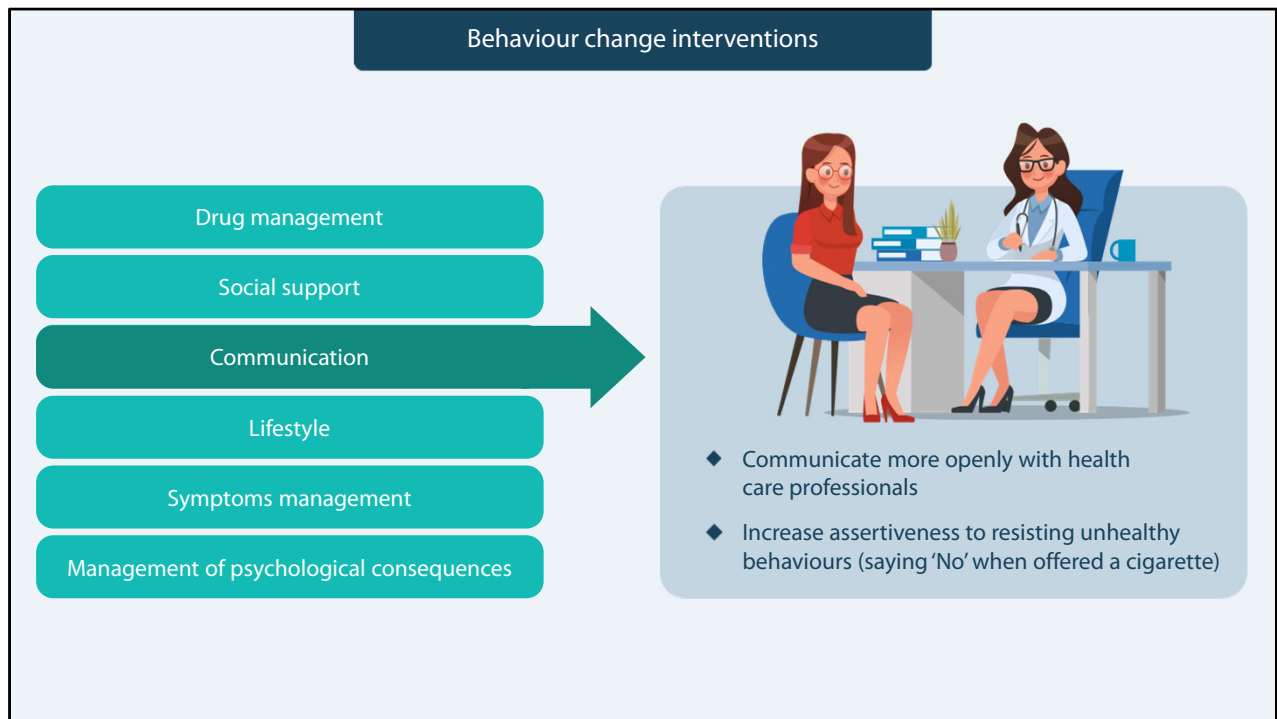
Sarah: That's right. Let's look at more examples of applying behaviour change interventions in chronic disease management, specifically in the areas of drug management, social support, communication, lifestyle, symptoms management and management of psychological consequences.



Sarah: To help in drug management, we can recommend interventions in overcoming barriers to adhere to taking medicine, for example, recommending a client with diabetes to follow the routine to take medicine before breakfast, so as to control the sugar level.

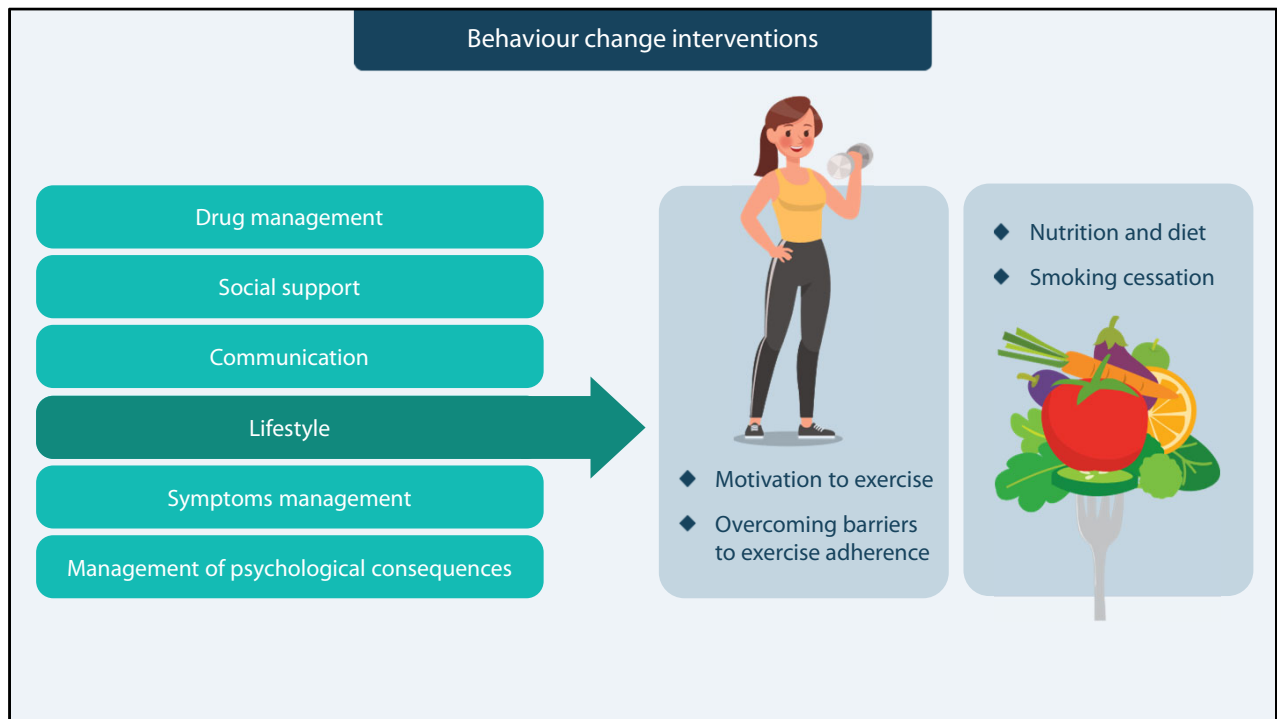


Sarah: To improve social support for clients, harnessing family support is crucial.

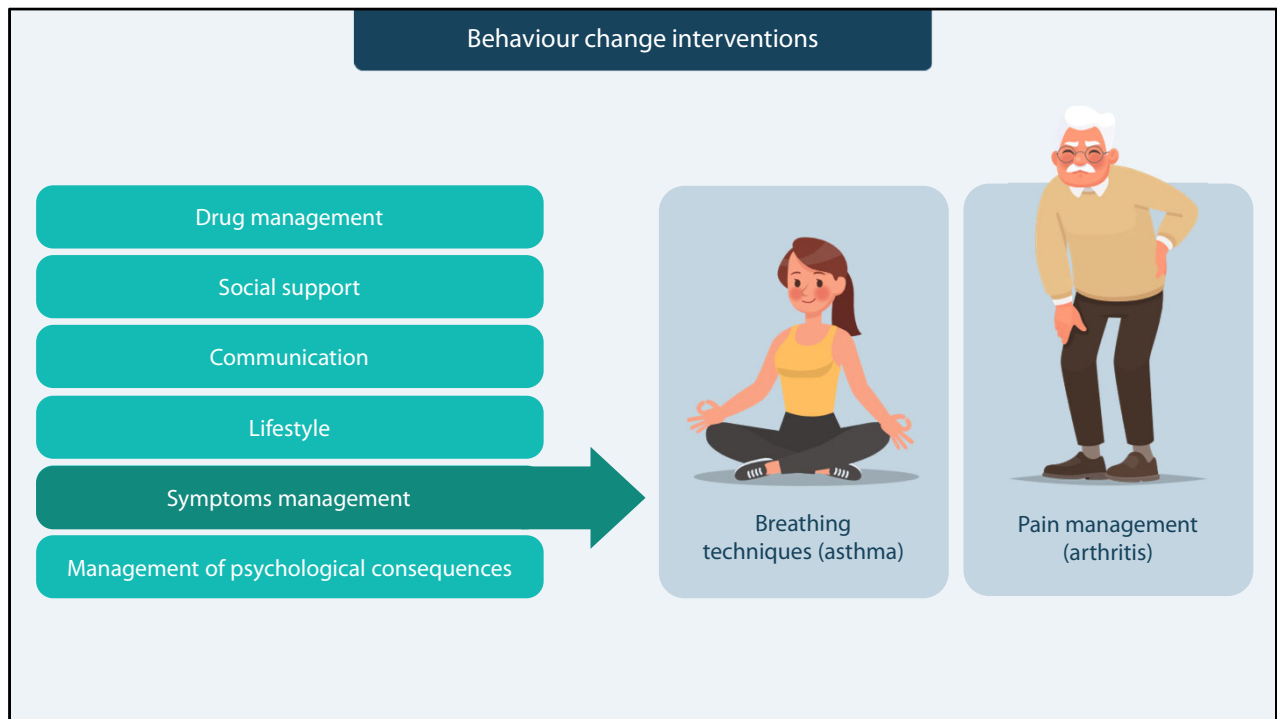


Sarah: To deal with communication needs, we can recommend clients to communicate more openly with health care professionals, and increase their assertiveness to resisting unhealthy behaviours, “for example saying ‘No’ when someone offers a stick of cigarette.”

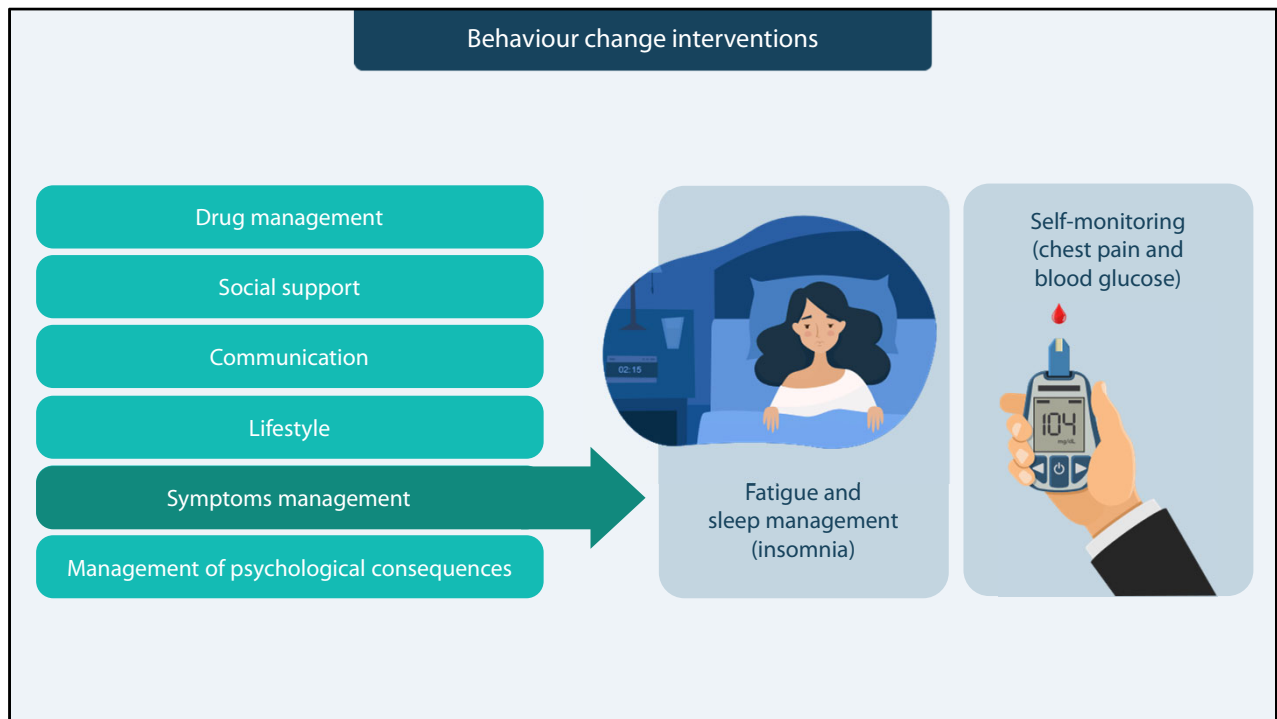




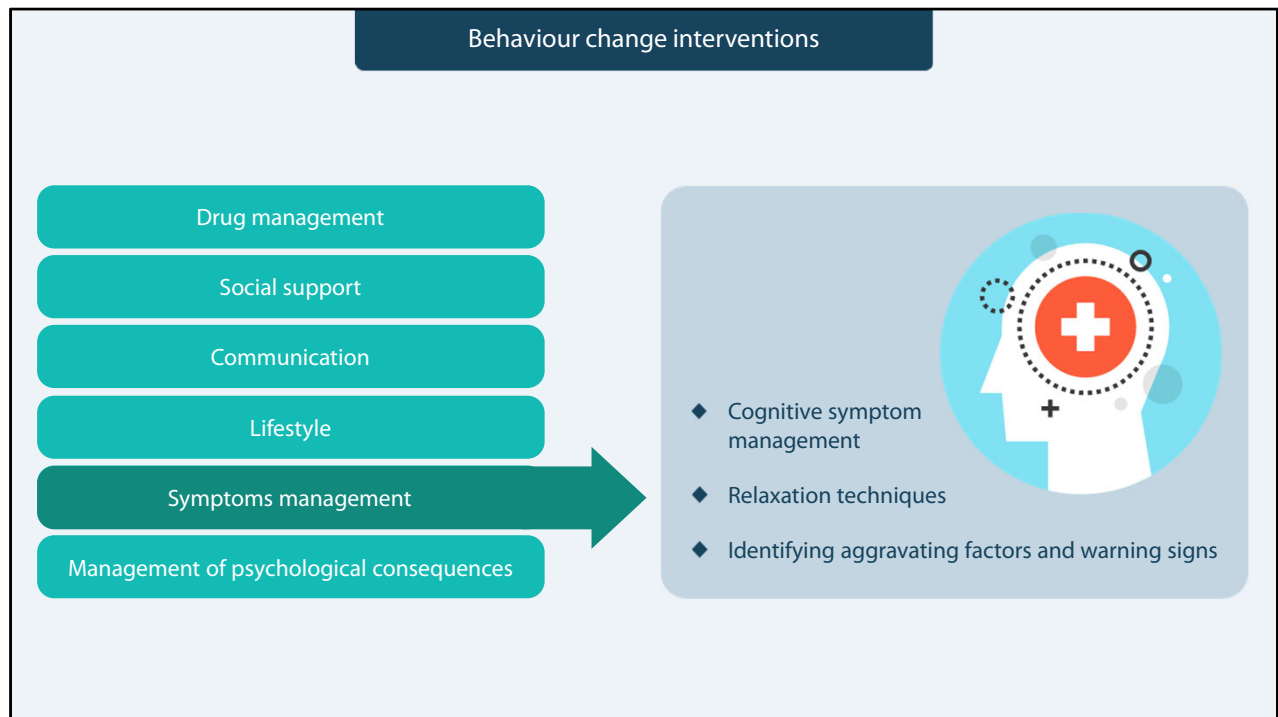
Sarah: To better manage clients' lifestyle needs, a variety of interventions can be recommended. These interventions include:  
Motivation to exercise, overcoming barriers to exercise adherence, nutrition and diet, and smoking cessation.



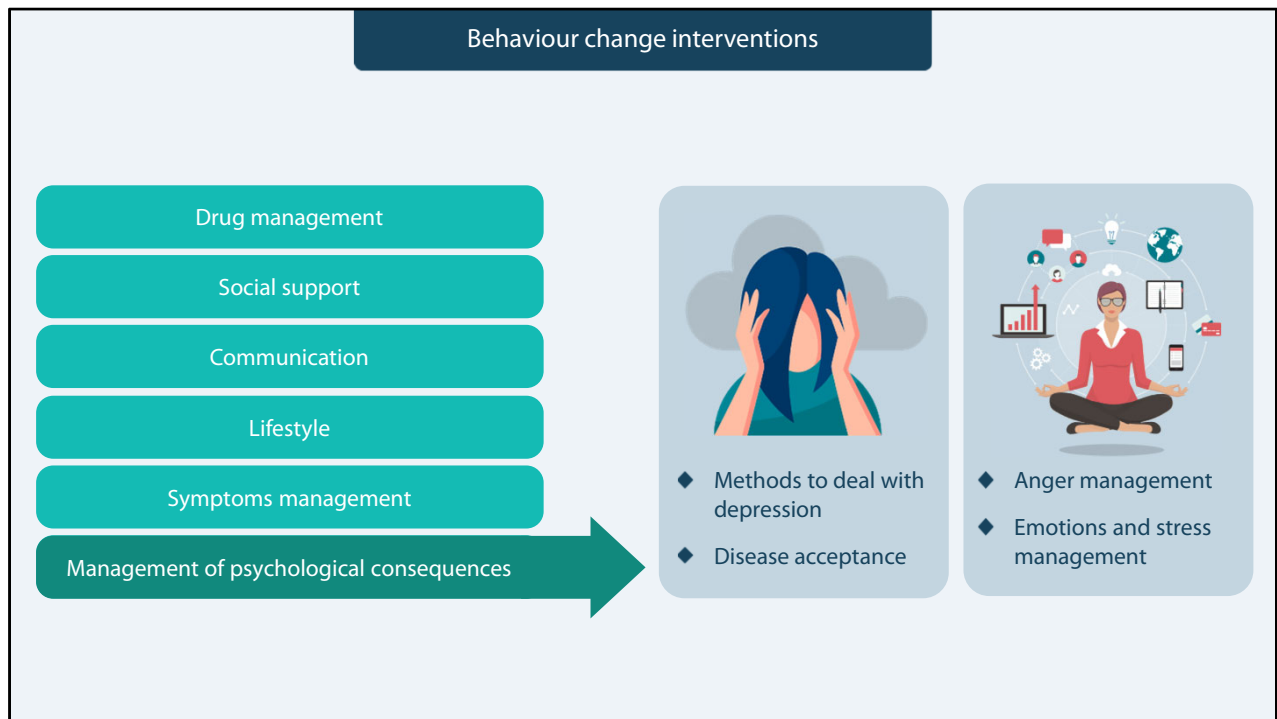
Sarah: To improve symptoms management, we can recommend several interventions such as breathing techniques for asthma, pain management for arthritis...



Sarah: ...fatigue and sleep management for insomnia, as well as self-monitoring for chest pain and blood glucose.



Sarah: Other interventions that fall into this category are cognitive symptom management, relaxation techniques and identifying aggravating factors and warning signs.



Sarah: To improve management of psychological consequences, we can recommend methods to deal with depression, disease acceptance, anger management, emotions and stress management.



Sarah: Can you think of any other interventions that can be recommended to clients?



James: I think we can recommend: how to access support services, finding spirituality, making action plans and setting goals.



James: Cognitive behavioural therapy could also be recommended to help manage uncertainty in clients' lives.





Sarah: Excellent, James!



Sarah: After recommending the appropriate behaviour change interventions, keep in mind that there are certain outcomes that we hope to achieve:  
First, we hope to prevent clients from engaging in harmful or risky behaviours, such as smoking.



Sarah: Second, we hope to promote engagement in health protective behaviours, such as exercising and timely cancer screenings and health screenings.

## Behaviour change interventions

### Behaviour change outcomes



3

Switch from more harmful to less harmful forms of behaviours

Sarah: Third, we hope clients can switch from more harmful to less harmful forms of behaviours, for example to reduce excessive drinking.

## Behaviour change interventions

### Behaviour change outcomes



4

Promote effective use of health care interventions

Sarah: Fourth, we hope to promote effective use of health care interventions, such as through improving medication adherence.

## Behaviour change interventions

### Behaviour change outcomes

- 5 Promote effective self-management of diseases



Sarah: Finally, we hope to promote effective self-management of diseases, for example, when clients can monitor their blood glucose concentration.



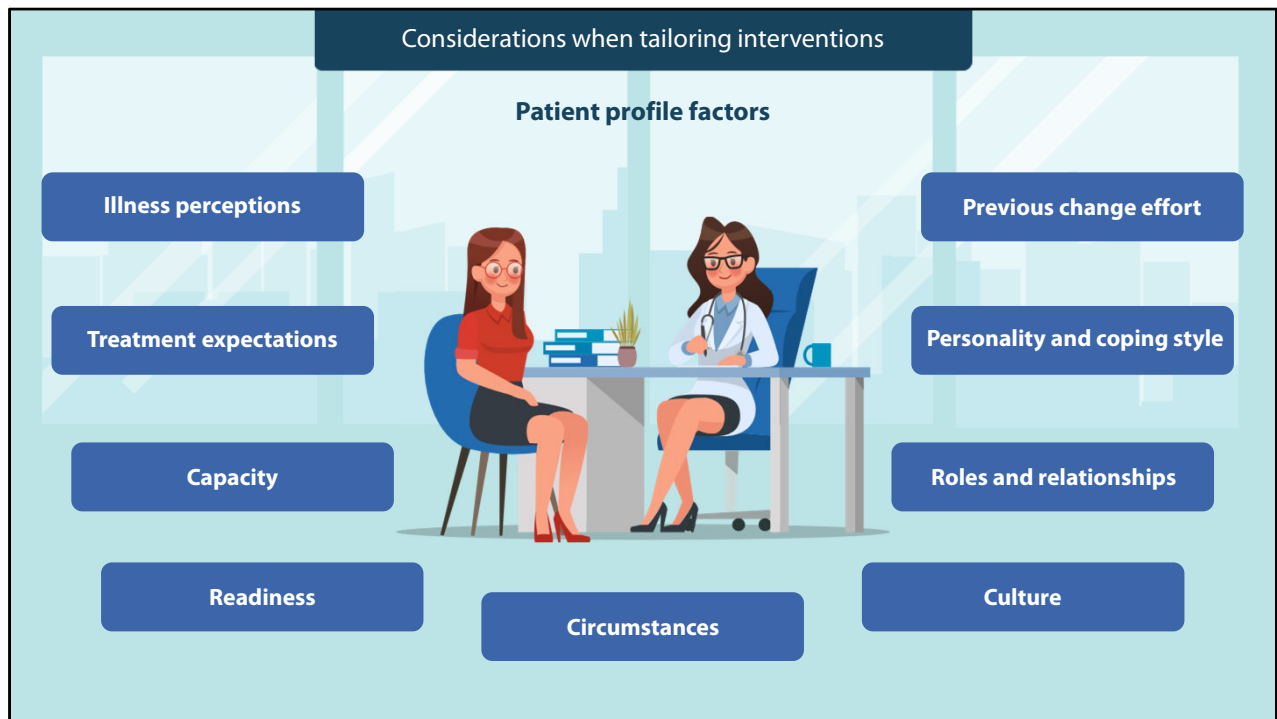


Sarah: When recommending interventions, we should take note of important considerations, such as patient profile factors and illness profile factors.

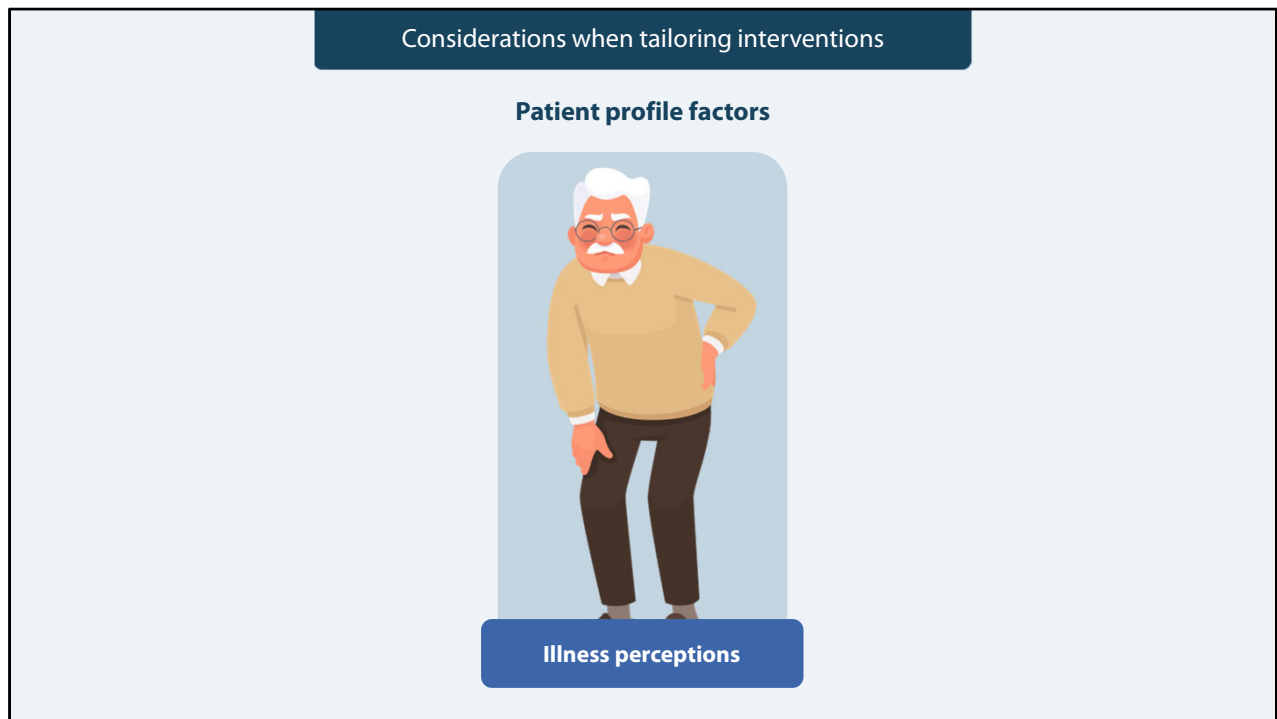




James: Could you elaborate on them?

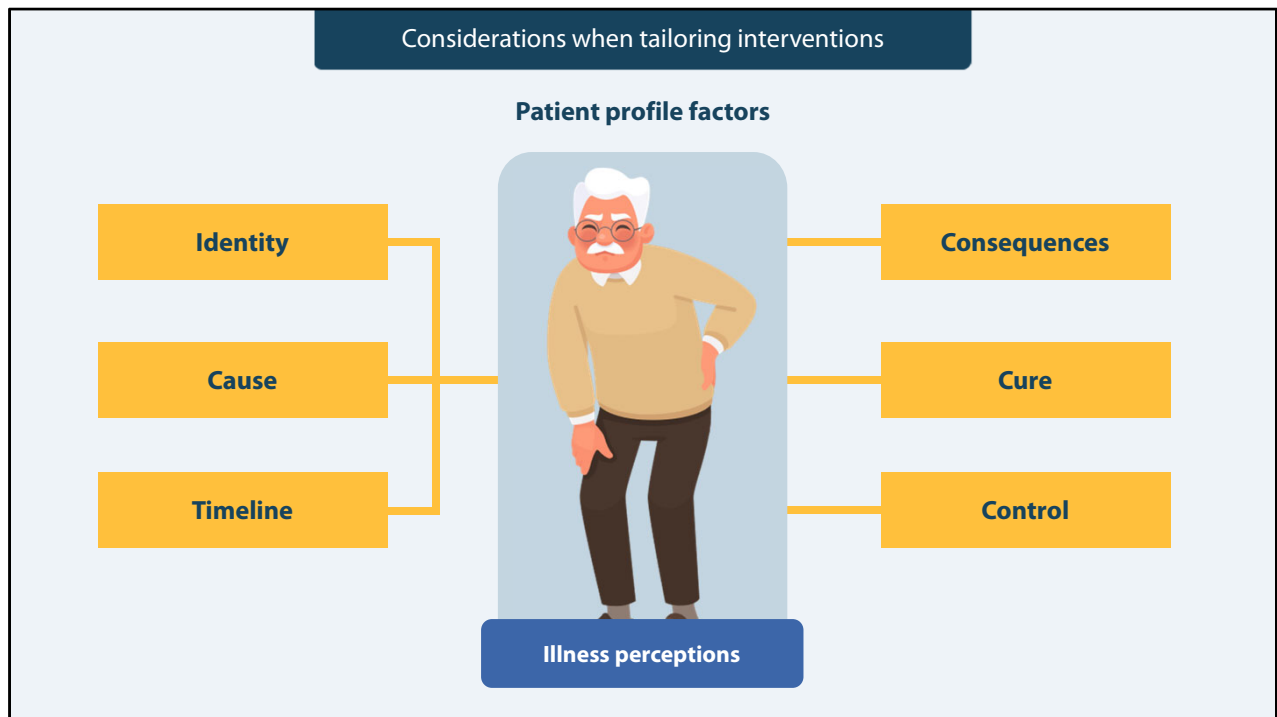


Sarah: Sure. Let's look at patient profile factors first. These factors are closely tied to the patient, and will affect the interventions that should be recommended.



Sarah: First, we need to understand the illness perceptions of the client. What does the client **think** about the illness?

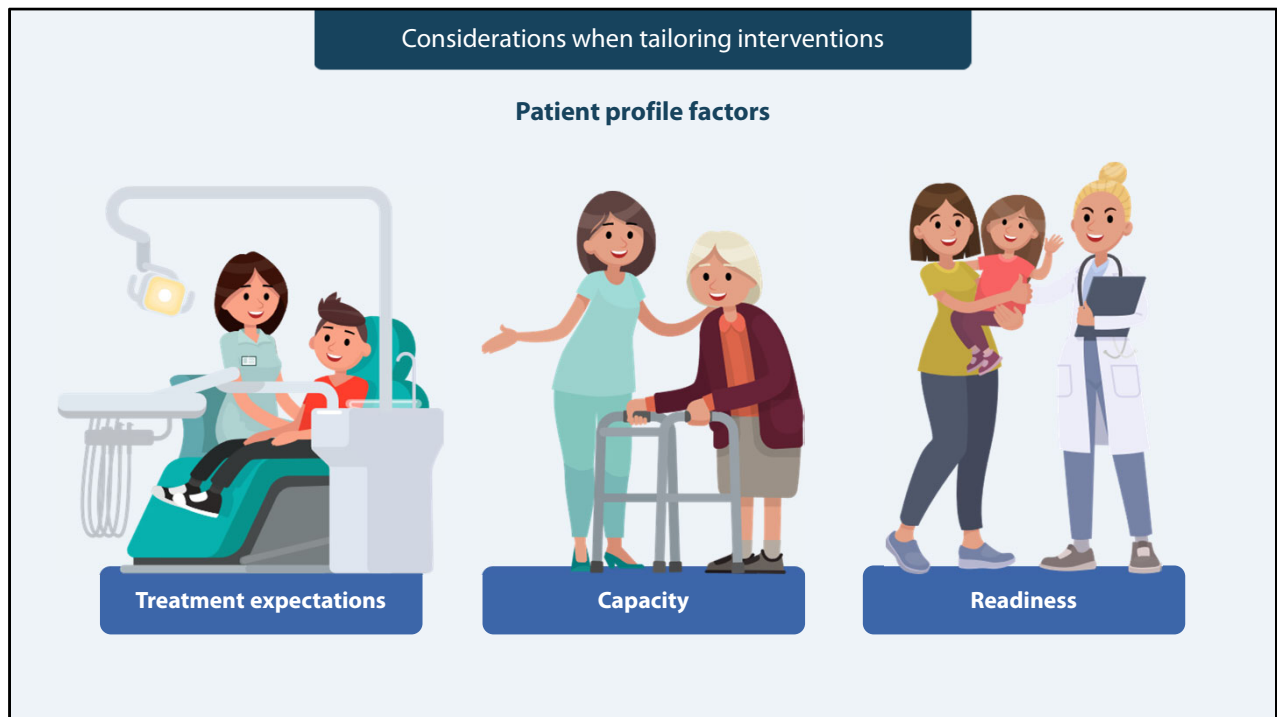
These are the personal perceptions of the illness that a client has.



Sarah:

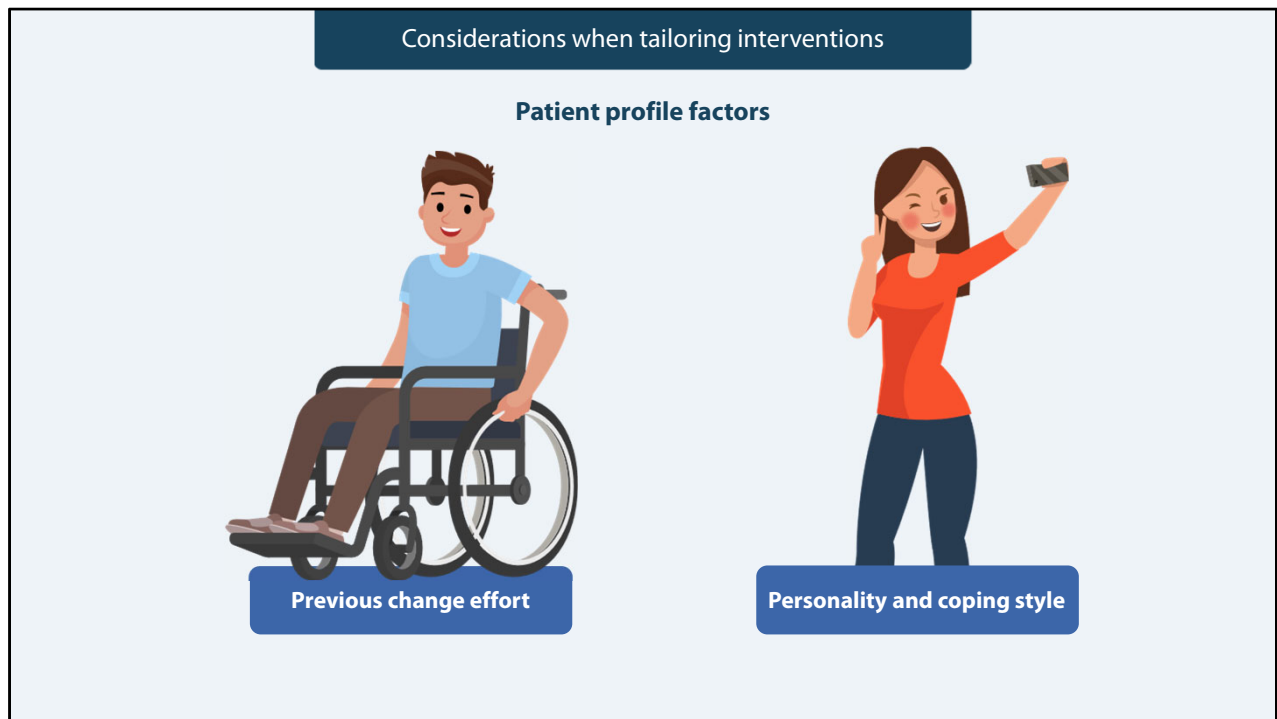
Whether through word of mouth or from the doctor, the client has formed a picture of the illness in his mind.

He has a label for the illness and symptoms; he has personal ideas about the cause or causes of the illness; he has formed a timeline on how long he thinks the illness will last; he has expectations of the effects and outcomes of the illness and he perceives certain ways that he can recover and control the illness.



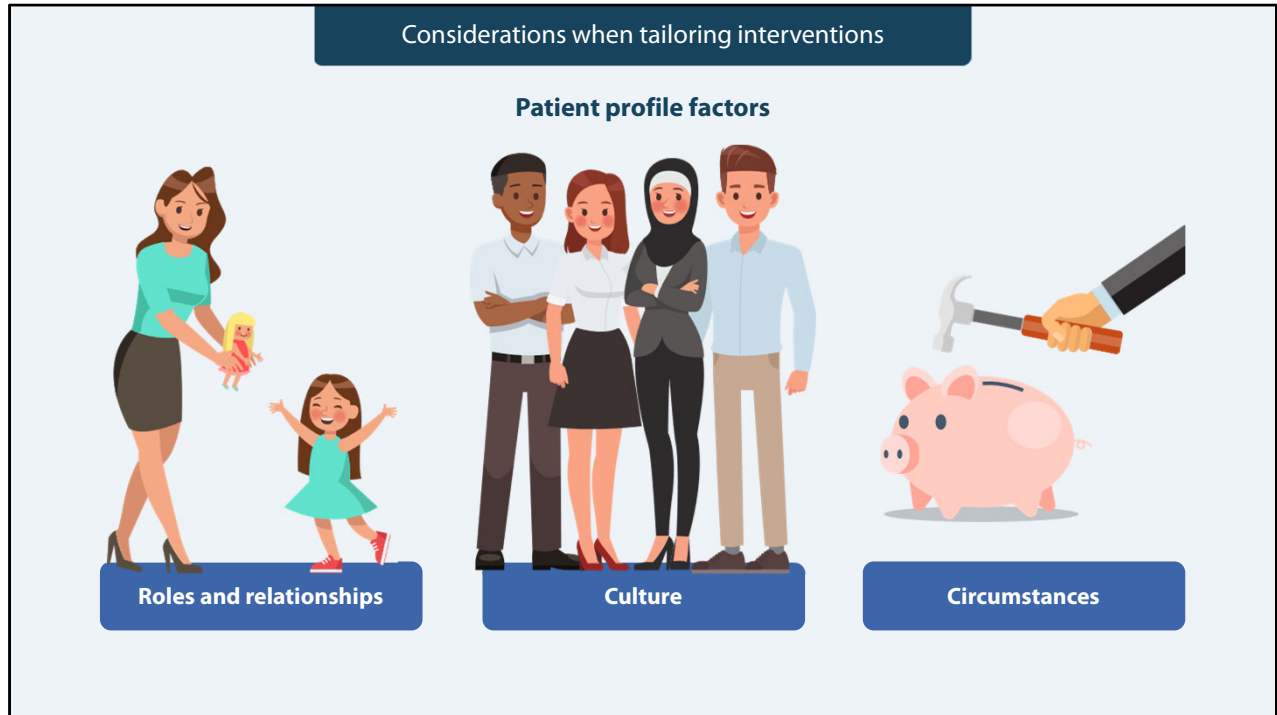
Sarah: Next, we need to understand the treatment expectations, capacity and readiness of the client.

What are the client's expectations of the treatment of the chronic disease; what are the available abilities and resources a client can mobilise to address the health demands; how confident and ready the client is on making the change to improve his health.



Sarah: We should take note of any previous change effort from the client, as past attempts to change behaviour can provide insights to potential barriers and resources of the client.

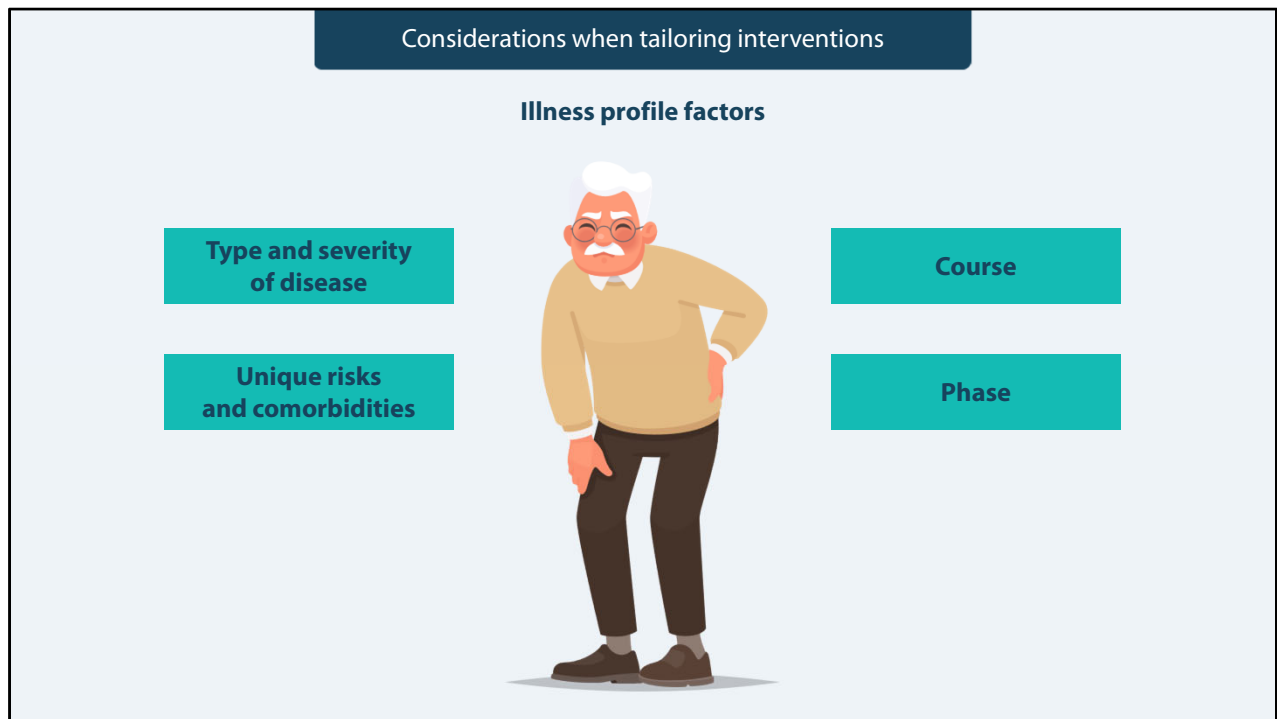
The client's personality and coping style should also be taken into consideration, so that interventions can be customised to increase success rate.



Sarah: It is also important to take note of the client's roles in life, such as being a mother, or a single working adult, as well as the client's relationships with other people.

Cultural perceptions could also affect receptiveness of intervention, for example, practicing yoga may not be acceptable to some cultures.

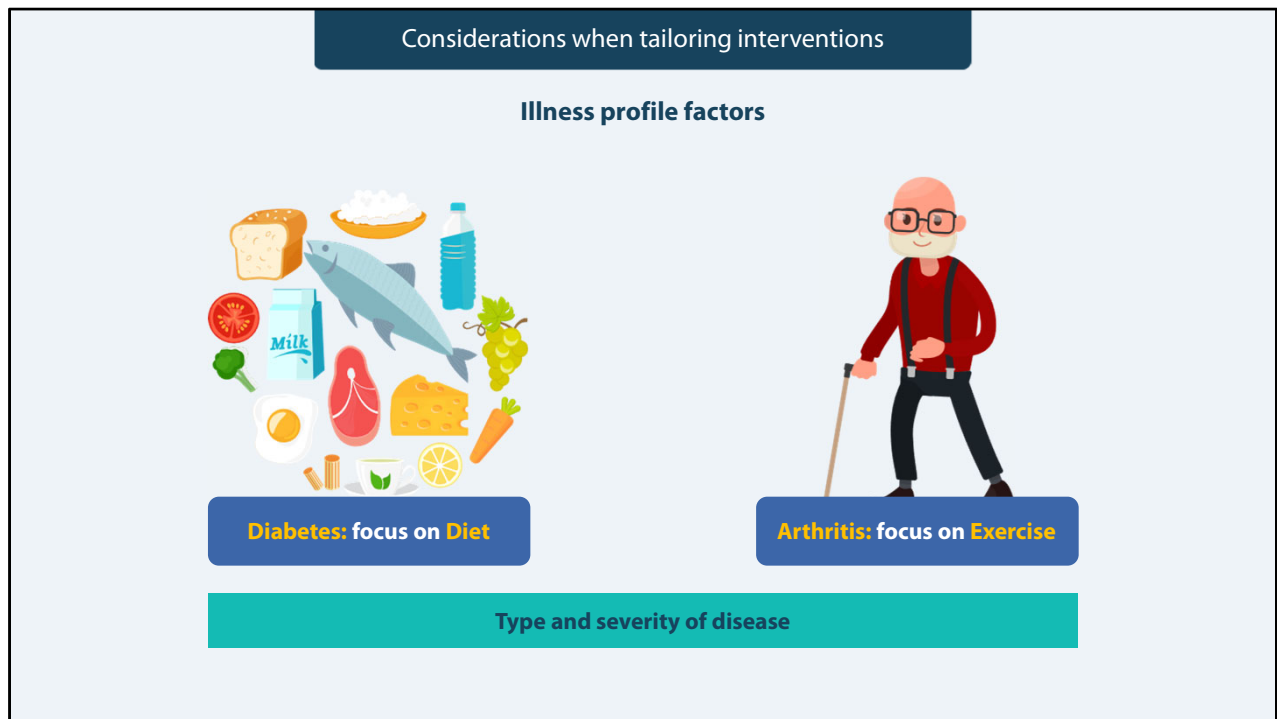
Last but not least, we should understand general circumstances of the client, such as his financial status or the current stage of life he is in.



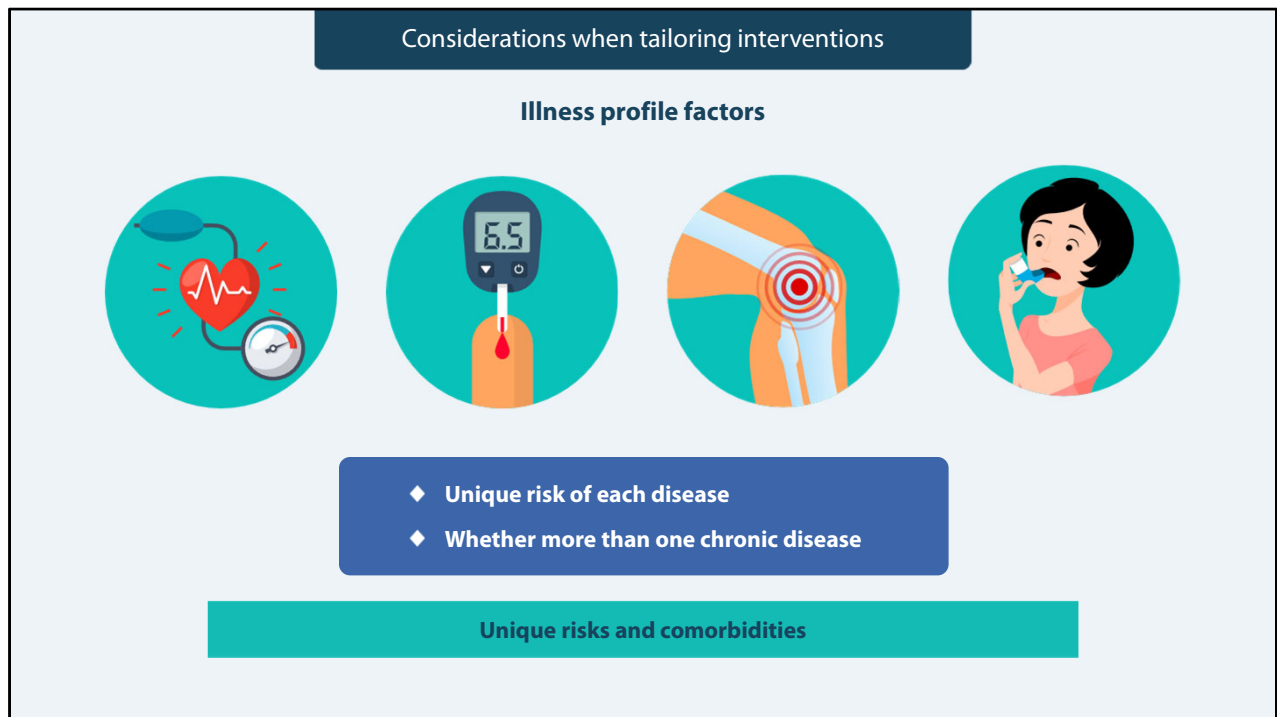
James: What about the illness profile factors?

Sarah: As the name suggests, illness profile factors are aspects of the illness that can influence interventions.

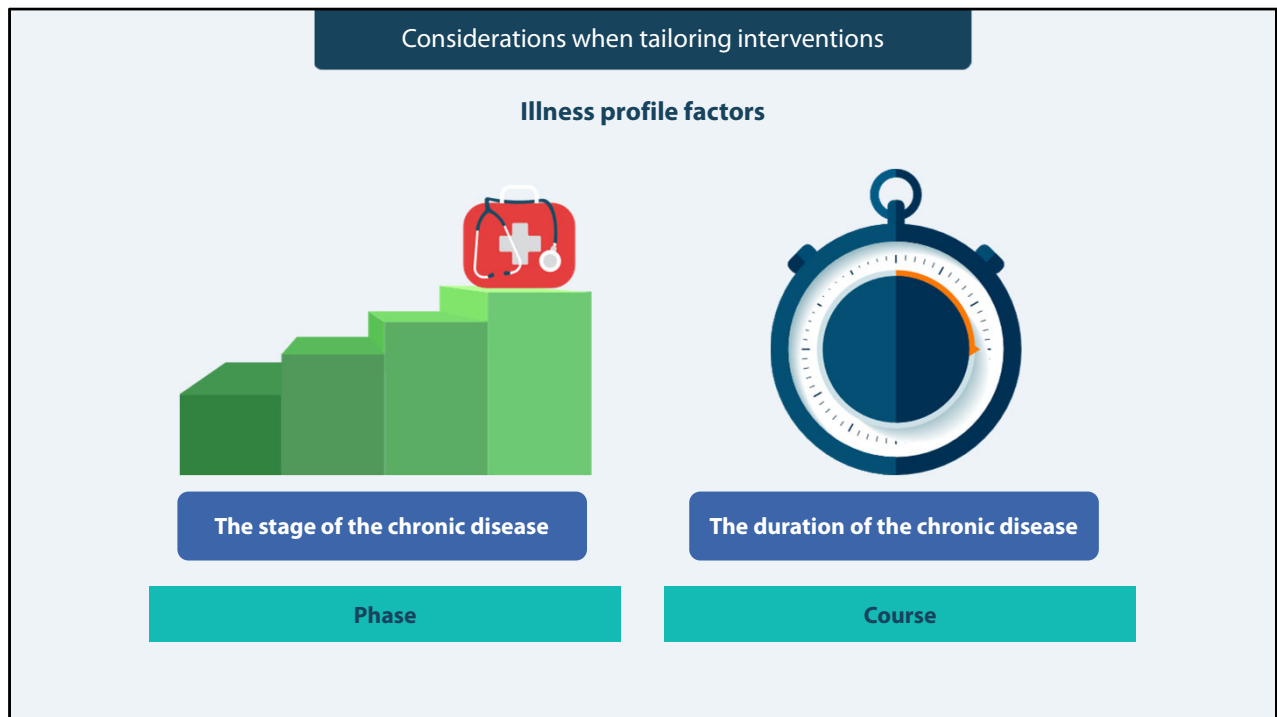




Sarah: Depending on the type and severity of the disease, the type of intervention can be different. For example, intervention for diabetes may have emphasis on diet, whereas for arthritis, the emphasis would be on exercise and pain management.

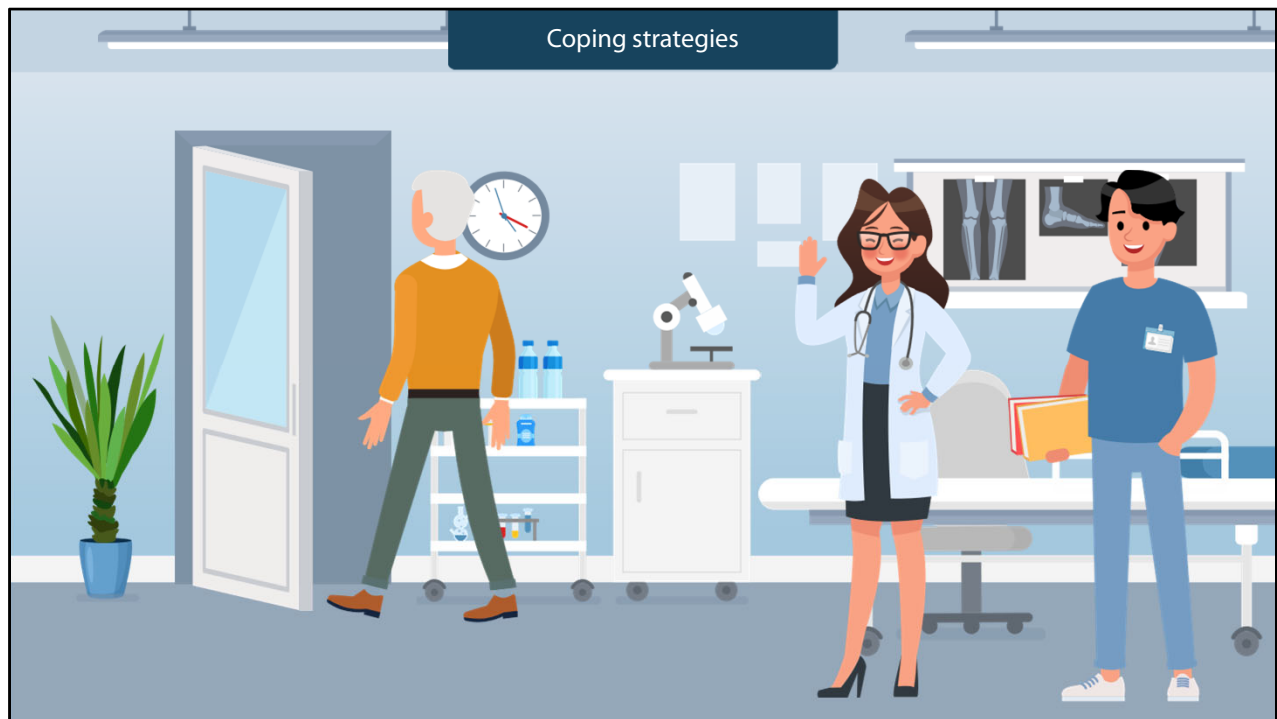


Sarah: We need to find out the unique risks of each chronic disease. When there is more than one chronic disease, in other words, comorbidities, considerations need to be taken into account so as to prevent risk of harming the client.

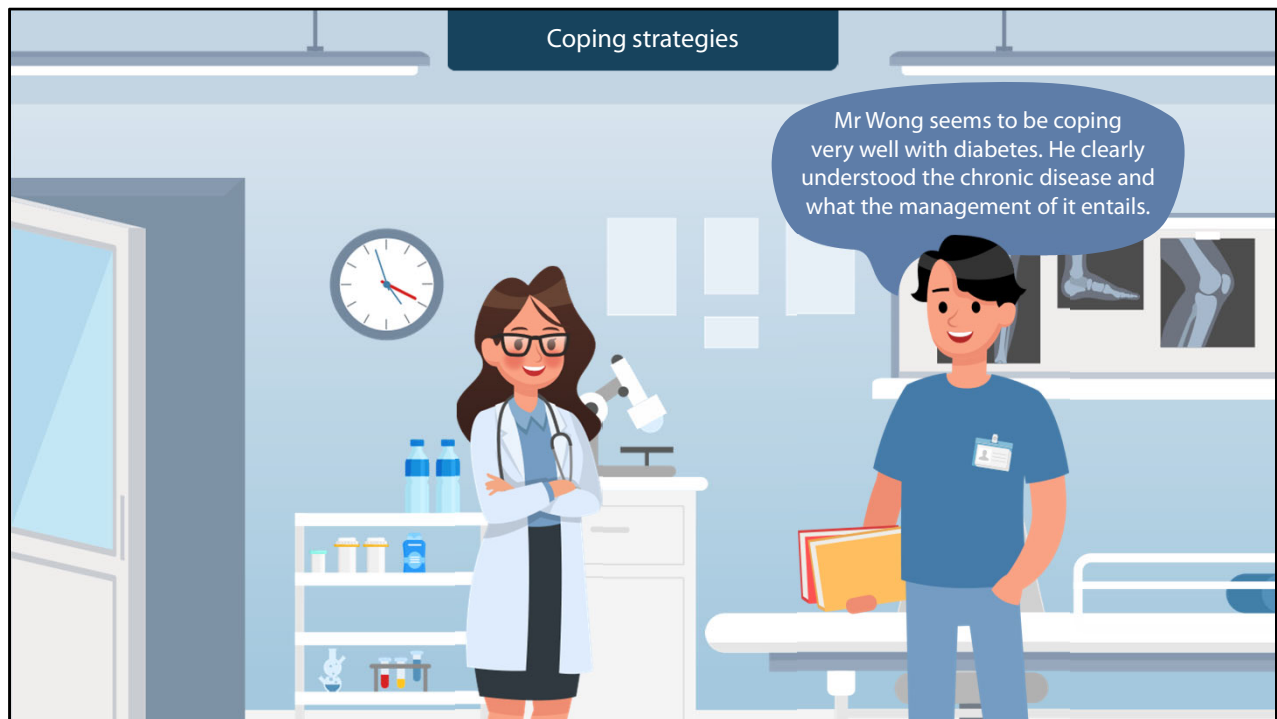


Sarah: Also, understanding the phase and course of the chronic disease will determine the interventions that can be recommended.

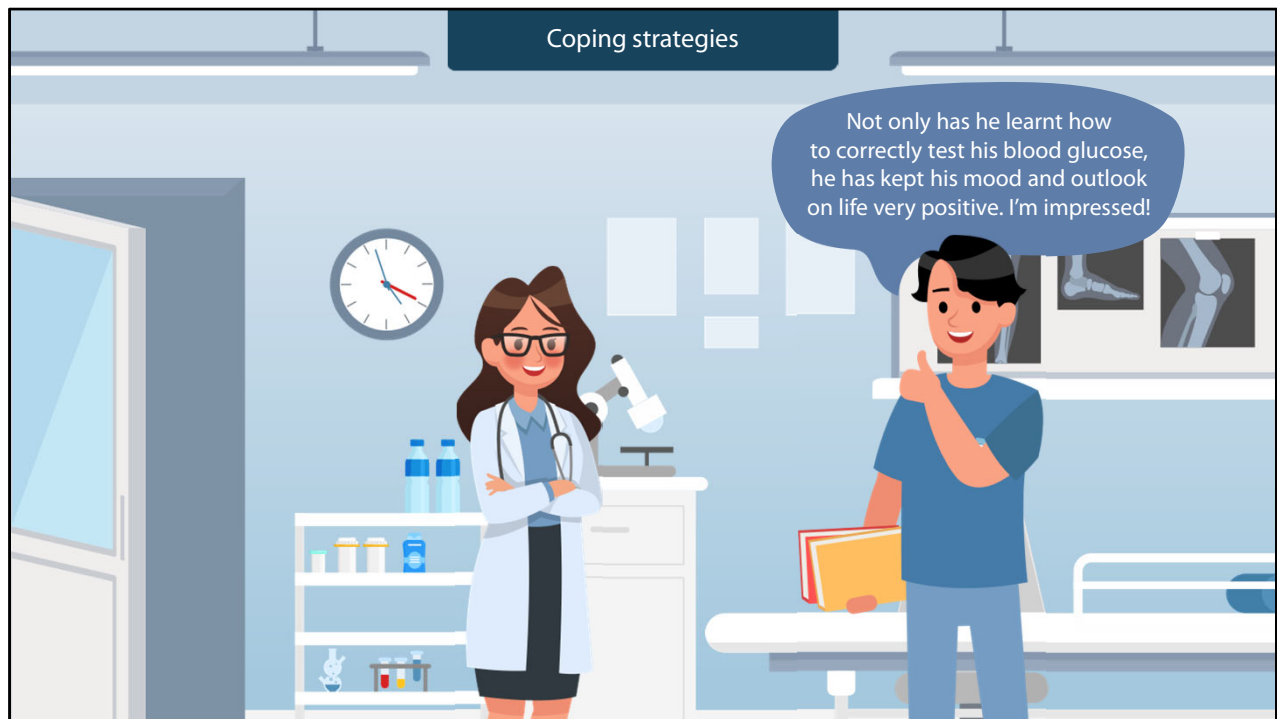




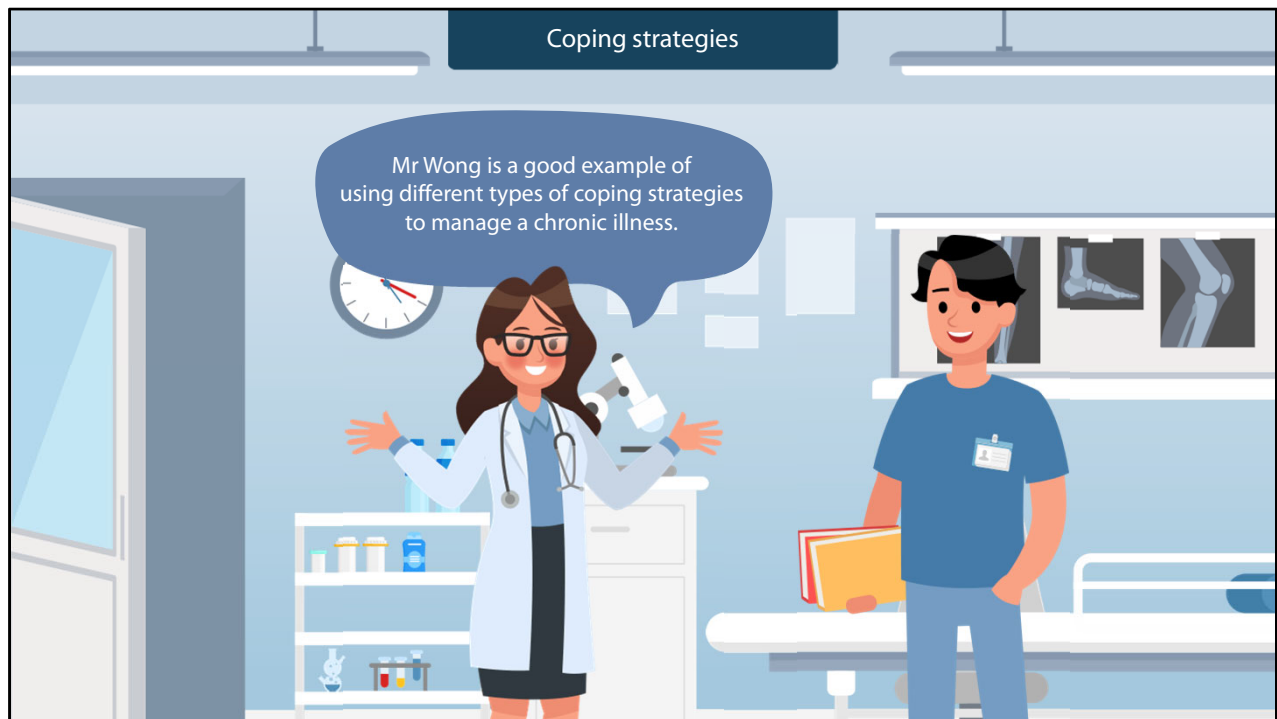
Narrator: Sarah completes a routine checkup session with Mr Wong, who has diabetes. Mr Wong leaves, and James has some questions for Sarah.



James: Mr Wong seems to be coping very well with diabetes. He clearly understood the chronic disease and what the management of it entails.

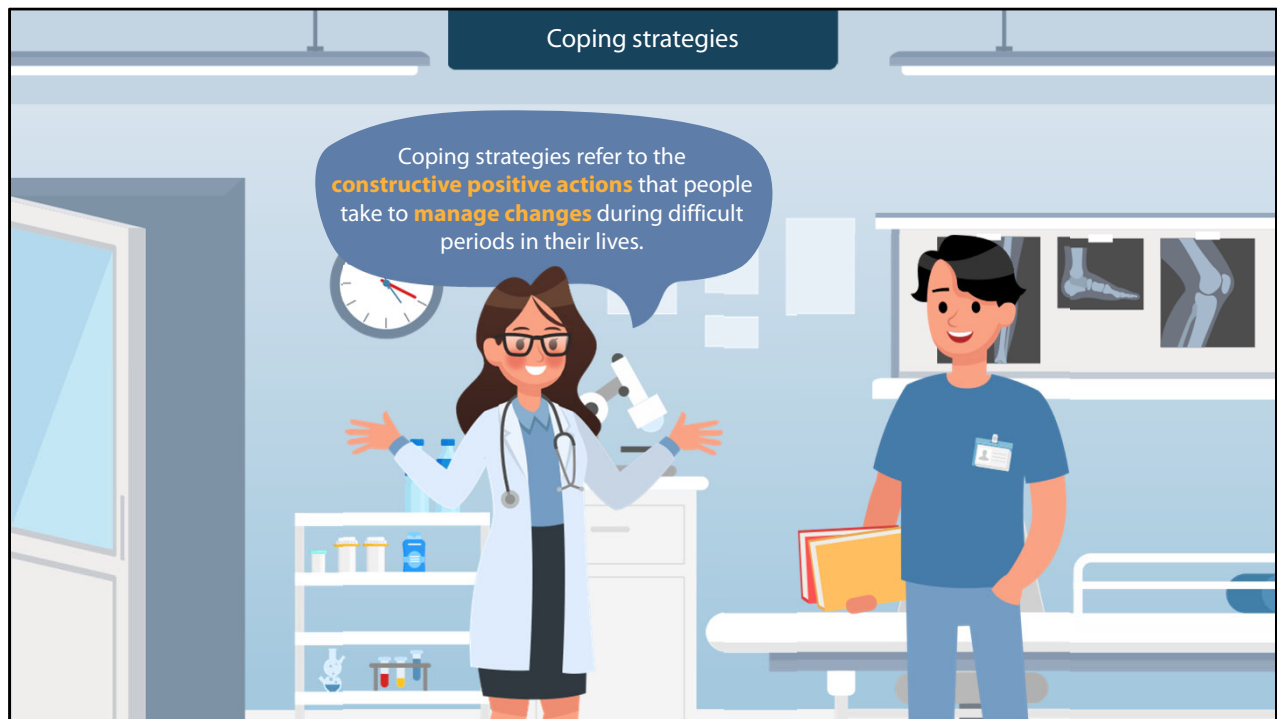


James: Not only has he learnt how to correctly test his blood glucose, he has kept his mood and outlook on life very positive. I'm impressed!

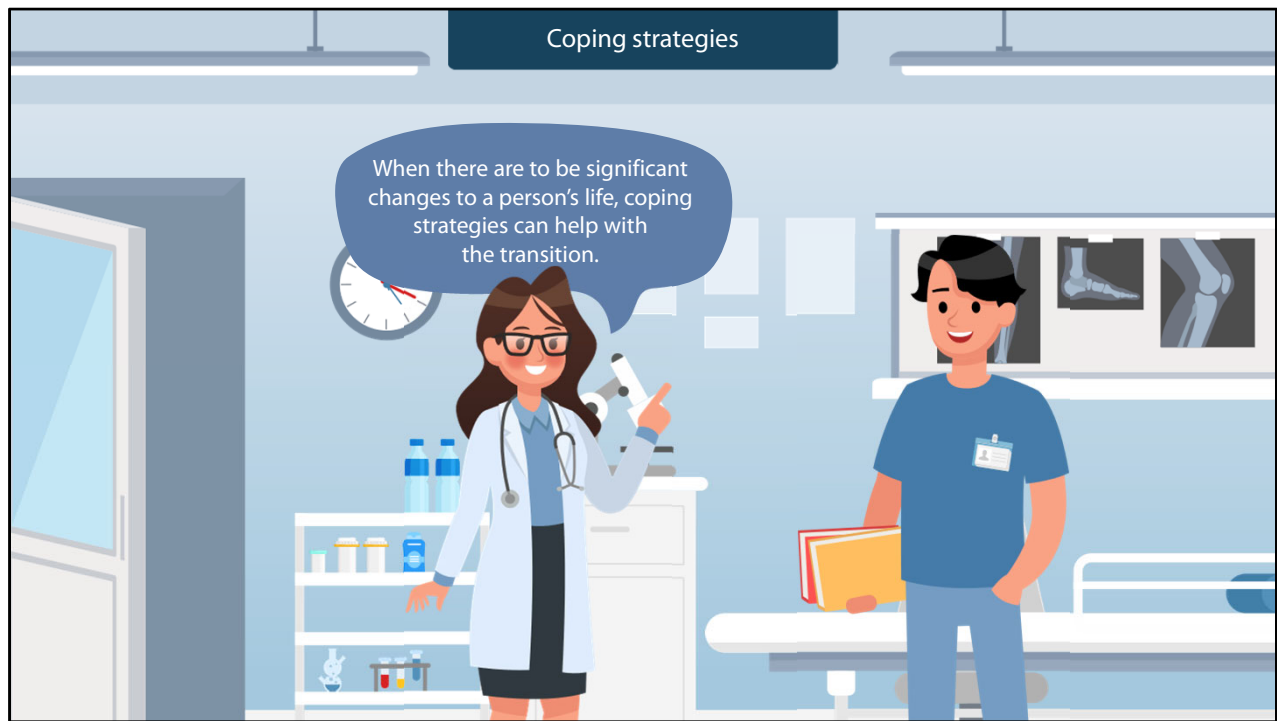


Sarah: Mr Wong is a good example of using different types of coping strategies to manage a chronic illness.

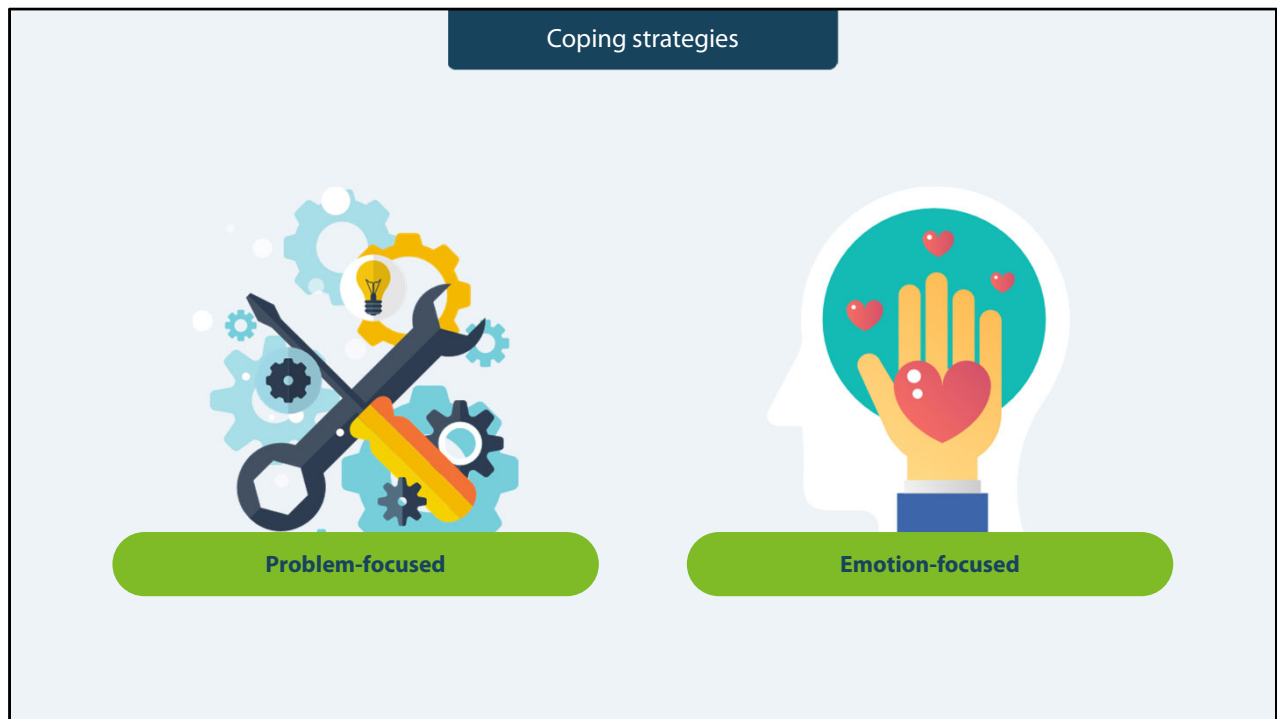




Sarah: Coping strategies refer to the constructive positive actions that people take to manage changes during difficult periods in their lives.



Sarah: When there are to be significant changes to a person's life, coping strategies can help with the transition.



Sarah: There are 2 main types of coping strategies: Problem-focused and emotion-focused.



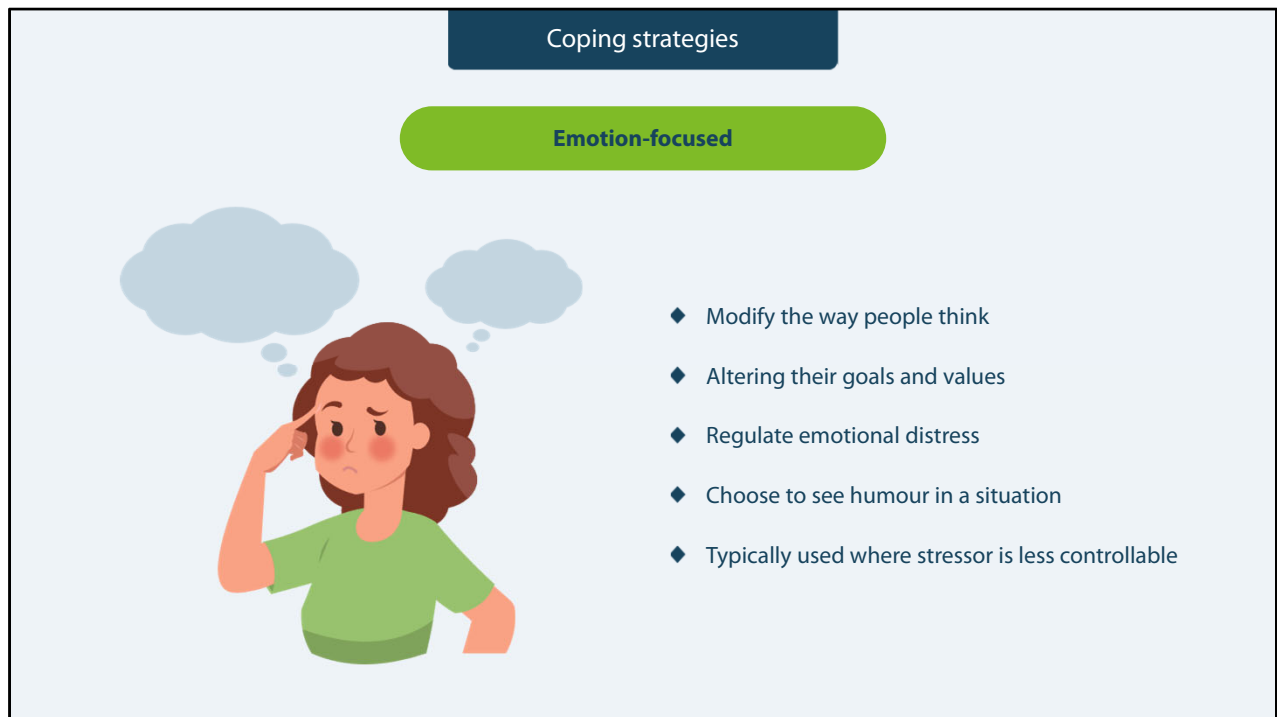
Sarah: Problem-focused coping tries to deal with the cause of the problem.

In Mr Wong's example, he finds out information on the disease and learns new skills to manage it.

He also rearranges his life around the disease.

These strategies attempt to alleviate stressful situations through taking control and weighing up pros & cons.

Research has shown that problem-focused coping is typically used in situations that are perceived to be controllable, for example, work issues.



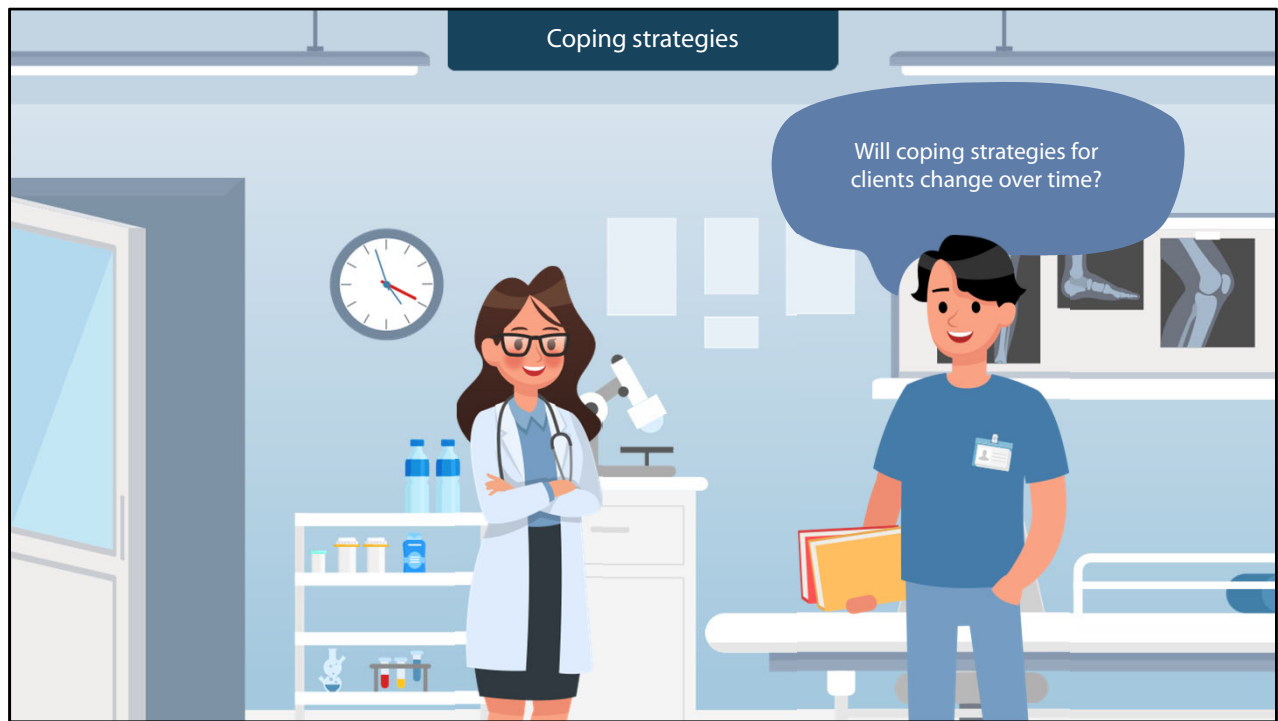
Sarah: Emotion-focused coping, on the other hand, tries to modify the way people think.

Clients may alter the way they think about a problem by altering their goals and values, or employing denial, or distancing themselves from the problem.

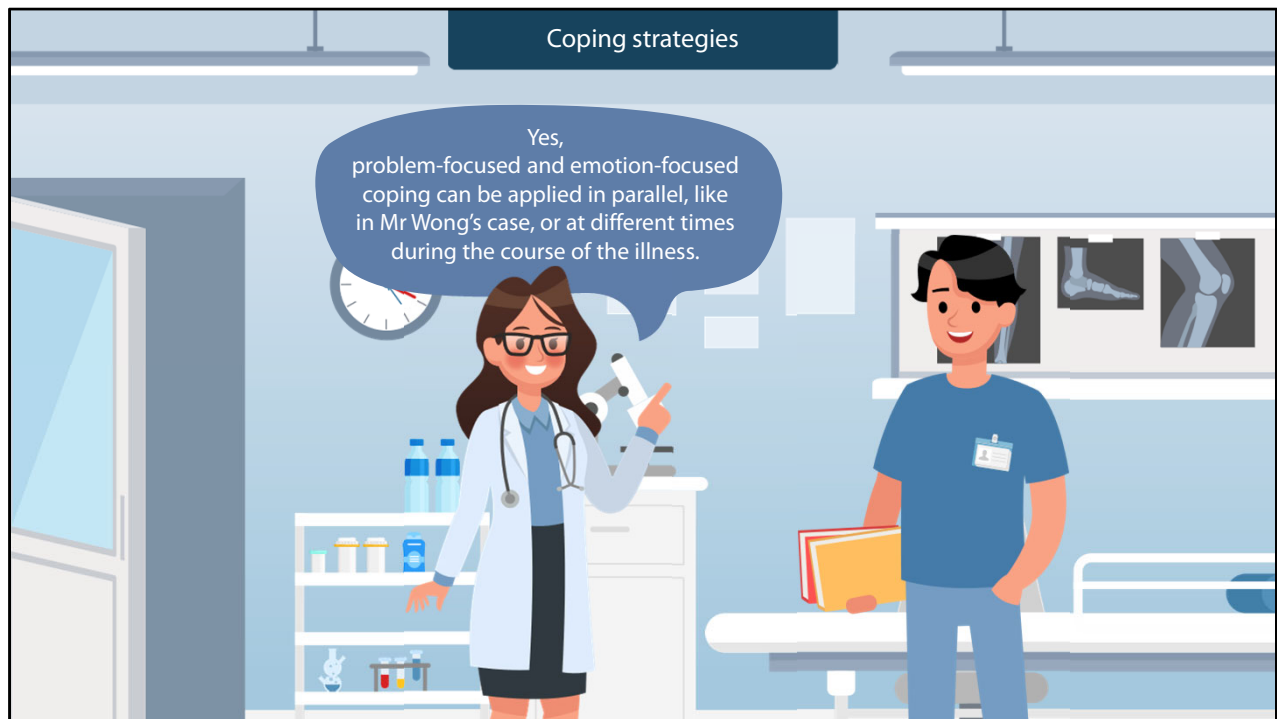
These strategies attempt to regulate emotional distress with stressful or potentially stressful events.

For Mr Wong, he chooses to see the humour in situations, thus generating optimism and alleviating some emotional stress of dealing with his chronic disease.

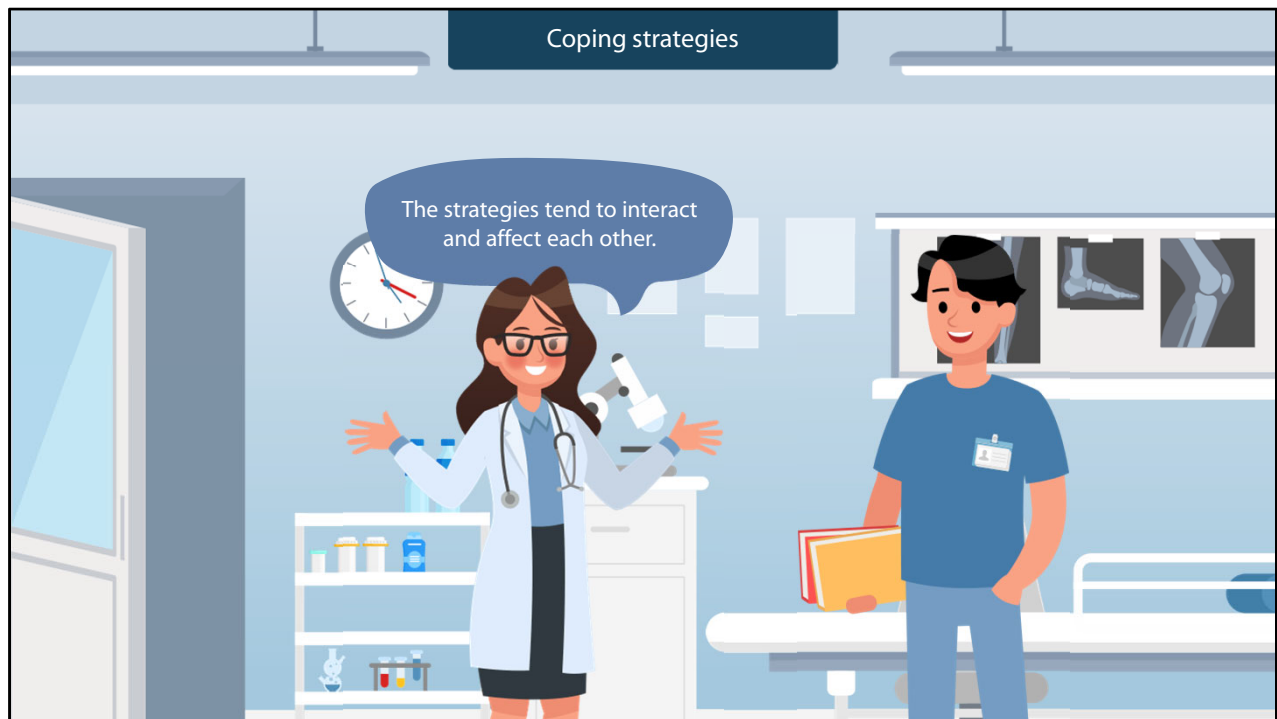
Research has shown that emotion-based coping is usually used in situations where the stressor is less controllable, for example, during terrorist attacks.



James: Will coping strategies for clients change over time?

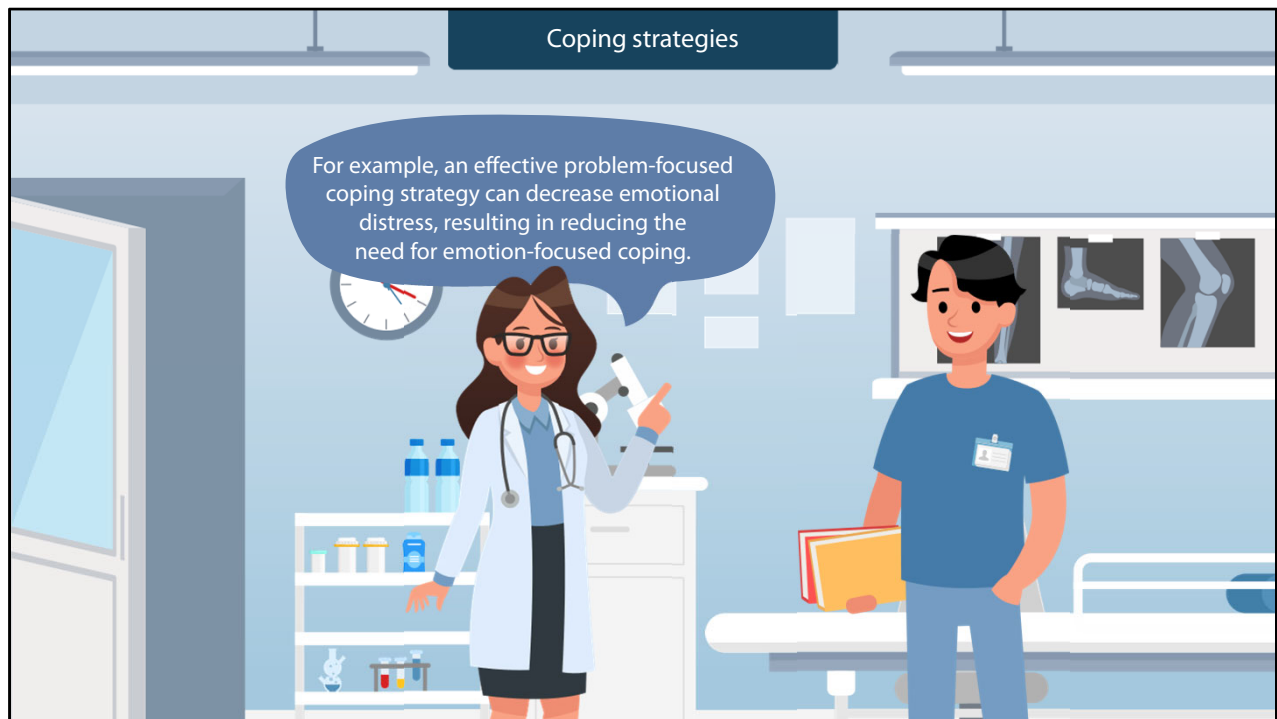


Sarah: Yes, problem-focused and emotion-focused coping can be applied in parallel, like in Mr Wong's case, or at different times during the course of the illness.

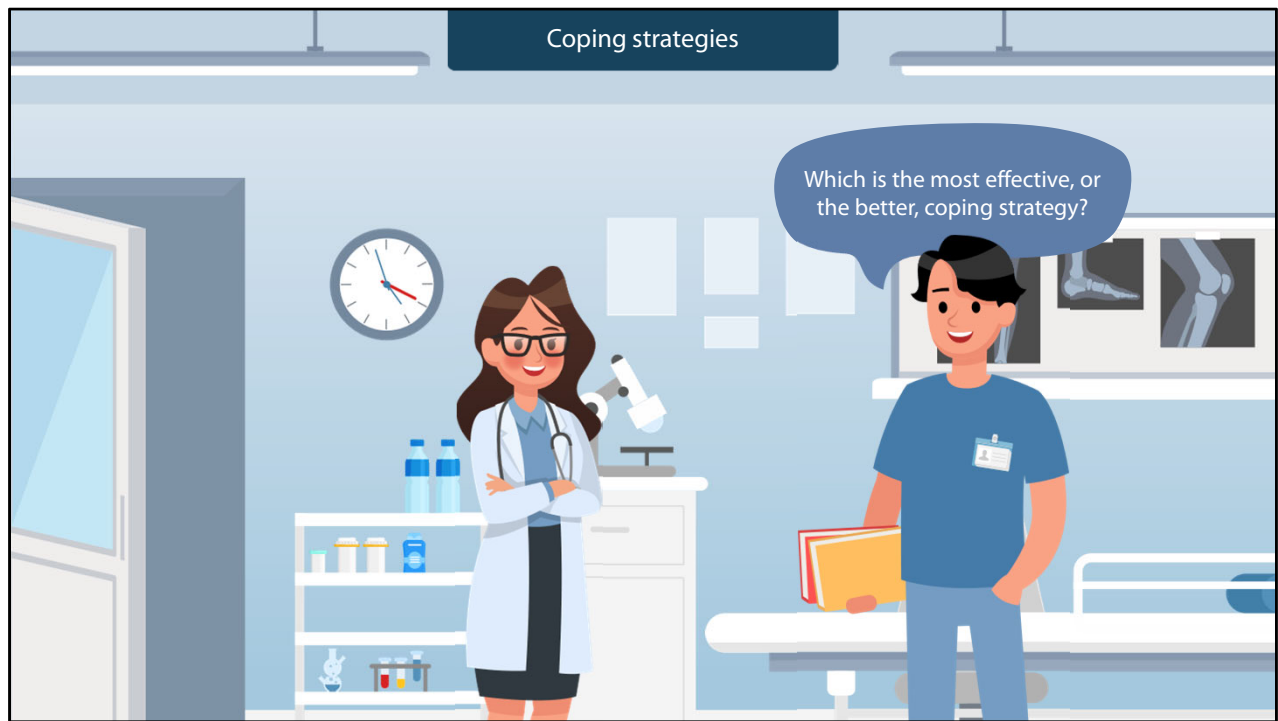


Sarah: The strategies tend to interact and affect each other.





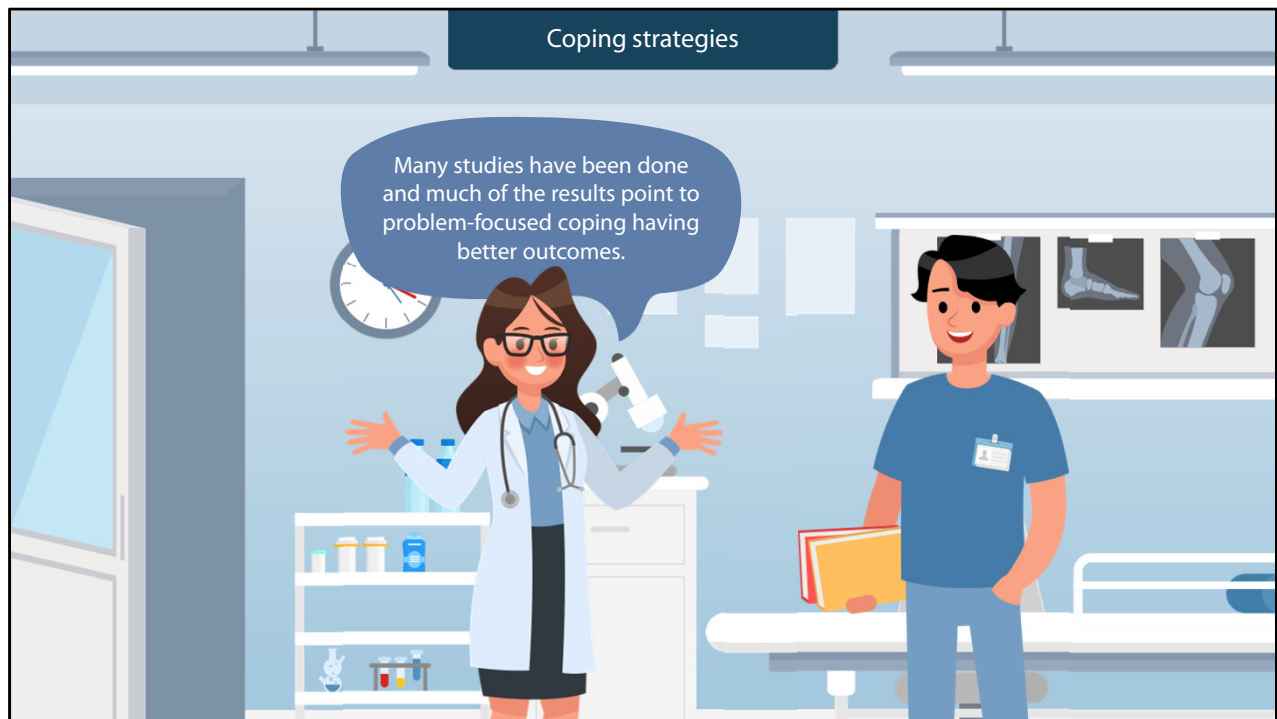
Sarah: For example, an effective problem-focused coping strategy can decrease emotional distress, resulting in reducing the need for emotion-focused coping.



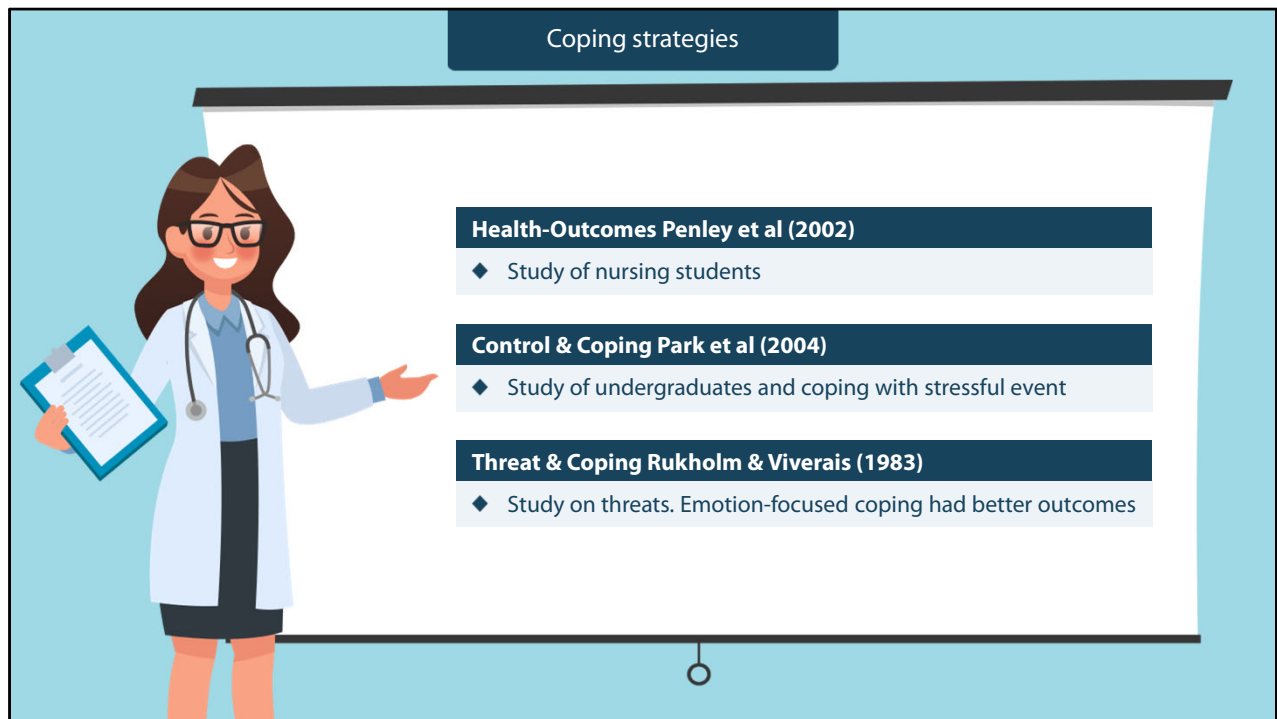
James: Which is the most effective, or the better, coping strategy?



Sarah: Well, probably the most effective strategy is problem-focused coping, if the individual has a realistic chance of changing the stressor or the aspects that lead to the stressor.



Sarah: Many studies have been done and much of the results point to problem-focused coping having better outcomes.



Sarah:

In 2002, a study of nursing students found problem focused as positively correlated with overall good health, whereas emotional focused was negatively correlated with overall good health.

In 2004, there was a study of undergraduates describing their most stressful event, its controllability, how they coped and their daily mood. The results again promoted problem-focused coping with more positive outcomes.

Yet, in 1983, through another study, it was concluded that if a person feels greatly threatened when exposed to a stressor, they need to deal with it using emotion-focused coping first.

Thereafter can they make use of the problem-focused techniques.



**LIMITATIONS FOR  
NON-MEDICAL PRACTITIONERS**



Sarah: A final note before you go for your break, James.



James: Uh-huh.





Sarah: For non-medical practitioners, they have limitations in prescribing interventions depending on their professional qualifications.



Sarah: Care should be exercised especially when suggesting or advising medication to clients.



James: OK, got it! Thank you very much for today, Sarah!



Sarah: No problem, James, see you around!



Now, let's refresh what we've learnt so far.



Click the **Quiz** button to edit this object

**Question 1**

What is a chronic illness?

- ☐ It is a client's subjective experience of a medical condition over a long period of time.
- ☐ It is a long lasting and permanent medical condition.
- ☐ It is a medical condition that lasts for a brief period of time, with quick onsets.
- ☐ It is an objective diagnosis of a long-term medical condition.