

Pain Management

2 HOUR CEU COURSE FOR RCFE AND ARF ADMINISTRATORS

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Definitions

"DSS" = Department of Social Services

"RCFE" = Residential Care Facility for the Elderly

"ARF" = Adult Residential Facility

"SNF" = Skilled Nursing Facility

"Resident" = anyone living in a long-term care facility

Sources

Many sources were consulted to prepare this course.

At the end of the course, these sources are listed.



Course Objectives

01

What is pain? Learn about the different types

02

Learn about the causes of pain

03

Discuss different types of treatment for pain

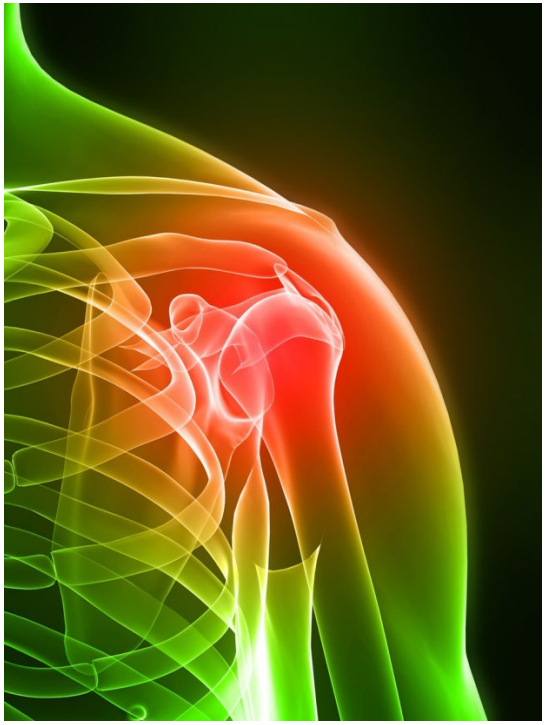
04

Discuss pain at the end of life

Pain 101

Pain is defined by the International Association for the Study of Pain as

> "an unpleasant sensory and emotional experience."



Pain 101

Everyone experiences pain at one point or time in their life. It is often an indication that something is wrong.

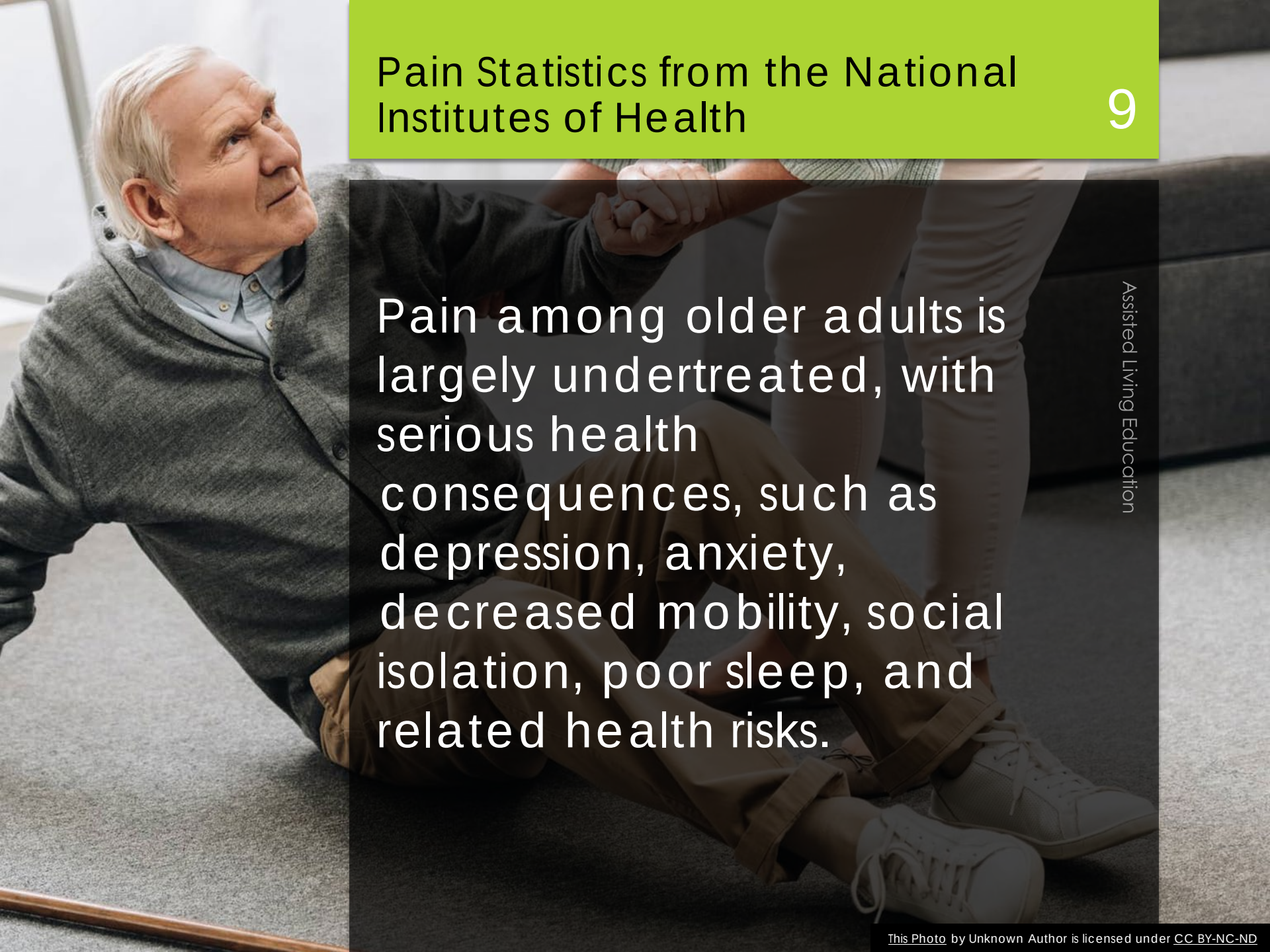
Feelings of pain can range from mild and occasional to severe and constant and can be acute or chronic (which we will be defining later in this course).

Pain Statistics from the National Institutes of Health

Research has shown that roughly 50% of community-living older adults and 75-85% of the elderly in care facilities suffer from chronic pain.*

*https://www.nia.nih.gov/health/chronic-pain

Pain Statistics from the National Institutes of Health



Pain among older adults is largely undertreated, with serious health consequences, such as depression, anxiety, decreased mobility, social isolation, poor sleep, and related health risks.

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Pain Statistics from the National Institutes of Health

In many cases, older adults are under-treated. Why?

Because many older adults feel pain is just a natural part of aging and do not tell their doctors about their problem.



Pain Statistics from the National Institutes of Health

Challenges regarding pain management:

1. Doctors do not want to prescribe narcotics;
2. The health care system restricts controlled substances; and
3. The patient does not always report their pain or fear addiction to pain killers.

Pain 101

Pain is very subjective – it cannot be verified. You must rely on what the resident tells you.

If a resident states that they are in pain, you must believe them.



Types of Pain

There are different types of pain:

Acute pain;	Chronic pain; and	Radiating pain

We will be discussing each of these in depth in this course.

Pain 101

Here is brief summary of how pain works:

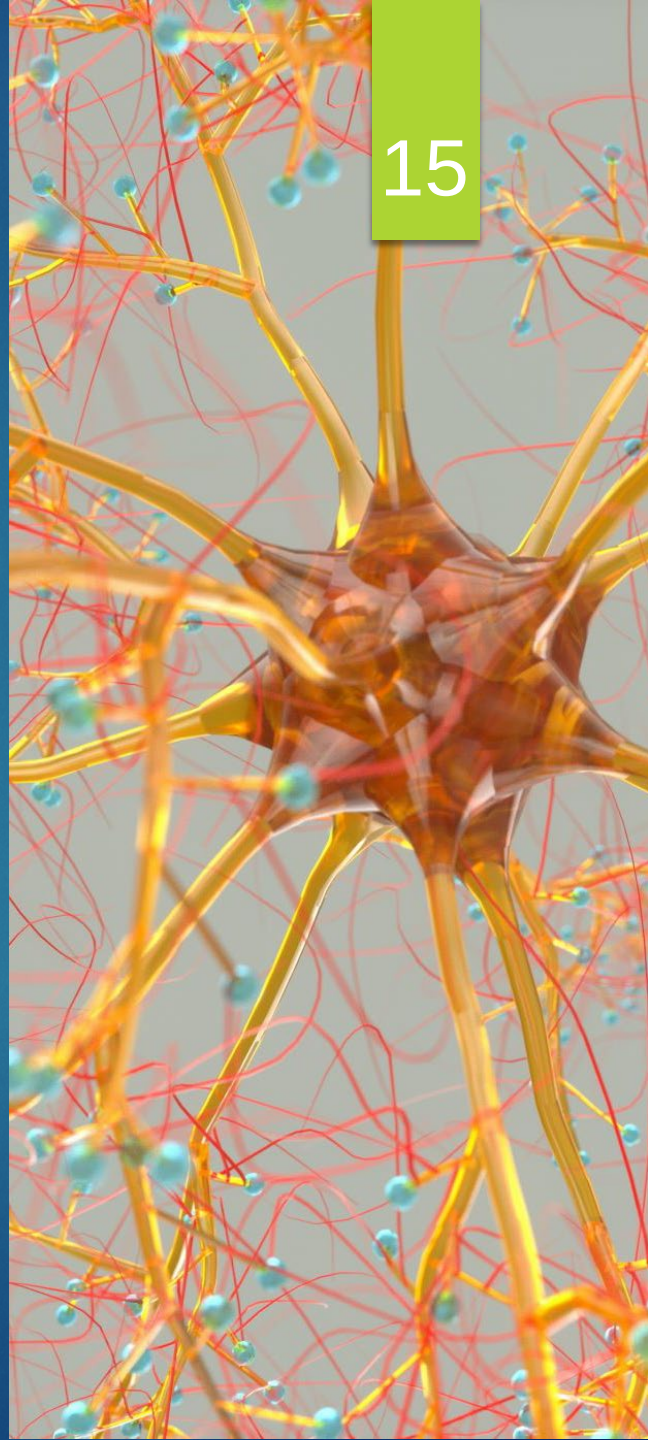
1. You stub your toe.

   Ouch!



Pain 101

2. Special pain receptors called *nociceptors* activate whenever there has been an injury.
3. An impulse is sent from the nociceptor through the nerve into the spinal cord, and eventually all the way to your brain. This happens within fractions of a second.



Pain 101

An area of the spinal cord called the *dorsal horn* acts as an information hub, simultaneously directing impulses to the brain and back down the spinal cord to the area of injury. This is when you reach down and grab your aching toe!

So, the brain has the message "OUCH!" and needs to make sense of what just happened.



Pain 101

6. When the pain signal reaches the brain, it goes to the thalamus which directs it to a few different areas for interpretations. A few areas in the cortex figure out where the pain came from and tries to analyze it – is it a sharp pain? Dull pain? Have I done this before? If so, what did I do?

Pain 101

7. Signals are also sent from the thalamus to the limbic system, which is the emotional center of the brain. If you start to cry, it is because your limbic system decided to had to have you cry.



Pain 101

So that is a summary of how pain is communicated from the point of injury to the brain.

Now let's focus on the different types of pain our residents may have.

Types of Pain



Again, there are different types of pain:

1. Acute pain;
2. Chronic pain; and
3. Radiating pain

We'll start with acute pain.

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Acute Pain

The word “acute” comes from the Latin word for needle – and if you have ever poked yourself with a needle, you can agree that this is a good representation of acute pain!

Your stubbed toe would be a good example of acute pain - after your toe healed, the pain sensations would stop. This is because the nociceptors no longer detect any tissue damage or potential injury. Acute pain does not persist after the initial injury has healed.

Acute Pain (cont'd)



Acute pain begins suddenly and is usually sharp in quality. It serves as a warning of disease or a threat to the body. Acute pain may be caused by many events or circumstances, such as:

- Surgery
- Broken bones
- Dental work
- Burns or cuts

Acute Pain (cont'd)

Acute pain may be mild and last just a moment, or it may be severe and last for weeks or months.

In most cases, acute pain does not last longer than 6 months and it disappears when the underlying cause of pain has healed or been treated.

But unrelieved acute pain, may lead to chronic pain (which we will discuss later).

Acute Pain (cont'd)

Here are some examples of acute pain that our residents may feel:

1. Broken hip due to a fall
2. Skin tears
3. Tension headache
4. Pain from a urinary tract infection
5. Dental surgery



Chronic Pain

Chronic pain is persistent pain that lasts longer than 3 months.

The word “chronic” comes from the Greek word for time.

Chronic pain lasts longer than acute pain and it is widely known as a disease, which known changes in the nerves that get worse with time.

Chronic Pain (cont'd)

Chronic pain lasts for weeks, months, even years.

Generally, it is diagnosed after three to six months of pain.

Chronic pain might have originated with an initial trauma/injury or infection, or there might be an ongoing cause of pain. However, some people suffer chronic pain in the absence of any past injury or evidence of body damage.



Chronic Pain (cont'd)

In some cases, the pain comes and goes, like with sciatic pain.

With chronic pain, one's nervous system is sometimes altered, making it more sensitive to pain. As a result, painful sensations might feel more severe and last longer.

Chronic Pain (cont'd)

How do you tell if pain is chronic? The Cleveland Clinic and other prestigious medical institutions have developed specific characteristics of chronic pain. Has/does the resident:

have pain that does not go away?	had many medical visits and yet no cause of pain has been identified?



Chronic Pain (cont'd)

Has/does the resident (cont'd):

3. tried many different types of medications to control the pain and yet it does not subside?
4. had numerous surgeries to control the pain and they have been unsuccessful?
5. visited their doctor many, many times and nothing changes?

Chronic Pain (cont'd)

If the resident answered *yes* to these questions, according to the Cleveland Clinic, they have chronic pain issues.

They also say that chronic pain:

persists beyond the expected healing time; *resists* treatments; and *insists* upon being recognized.

Chronic Pain (cont'd)

Before we go more in depth into the *causes* of chronic pain, let's discuss what chronic pain feels like.

Sensations of chronic pain can range from a small, constant ache (like a tooth ache) to excruciating pain.

Chronic Pain (cont'd)

Chronic pain symptoms can include one or more of the following:

- Aching
- Burning
- Crushing pain
- Dull pain
- Throbbing
- Mental fogginess
- Flu-like symptoms
- Numbness
- Stinging sensations
- Stinging
- Vice-like pain
- Jabbing pain

Chronic Pain (cont'd)

Physical effects can include:

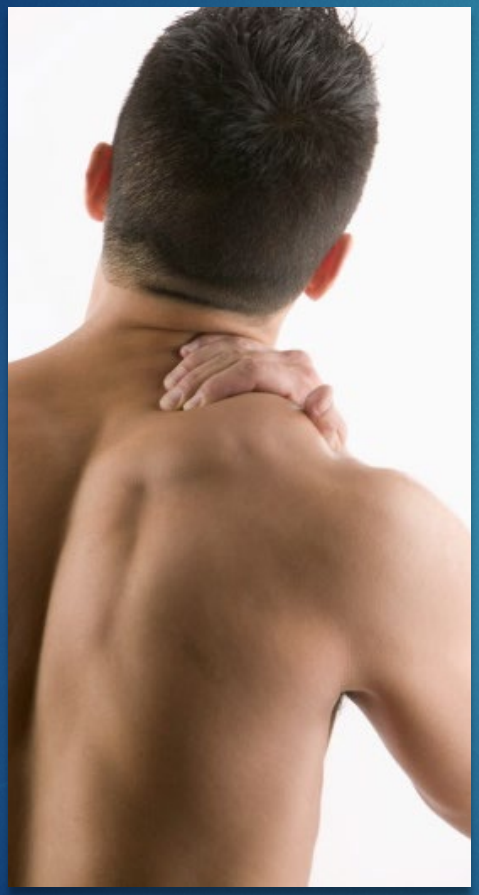
- tense muscles
- limited mobility
- a lack of energy/fatigue
- changes in appetite
- sleep disturbances

Emotional effects can include:

- depression
- anger
- anxiety
- fear of re-injury



Chronic Pain Causes



Common chronic pain issues:

- Arthritis pain
- Osteoporosis pain
- Muscle pain
- Headache/migraines
- Lower back pain
- Cancer pain
- Neuropathic pain (pain resulting from damage to nerves)
- Psychogenic pain (pain not due to past disease or injury or any visible sign of damage inside)



Arthritis

- Arthritis is the leading cause of disability in the U.S.
- There are over 100 different forms of arthritis.
- The most common form, osteoarthritis (degenerative joint disease) is a result of trauma to the joint, infection of the joint, or age.
- Other arthritis forms are rheumatoid arthritis and psoriatic arthritis, autoimmune diseases in which the body attacks itself.
- Arthritis strikes more women than men.

Arthritis (cont'd)

Most people think of arthritis as a disease that affects the joints. (The joints are the intersections where two bones meet.)

But arthritis is actually a term that is used to describe more than 100 medical conditions that can affect not only joints, but muscles and bones as well. And, some conditions, like rheumatoid arthritis, can attack the entire body.

Arthritis (cont'd)

Arthritis symptoms:

- Pain and stiffness in the body
- Reduced mobility
- Swelling of the joints
- Arthritic joints may appear red and swollen, and over time may develop movement limitations or physical deformities

Arthritis (cont'd)

Treatments:

Because there are so many different types of arthritis, treatments vary depending on the type.

Generally, painkillers are used to treat pain and inflammation, and it is recommended that people who are overweight maintain a healthy weight.

Arthritis (cont'd)

According to the CDC's National Health Interview Survey* (2019–2021), about 53.2 million U.S. adults report a diagnosis of arthritis of any type — and osteoarthritis ("OA") is the most common form.

While the CDC does not break out OA-only numbers in that dataset, multiple epidemiologic studies and insurance-claims analyses show that OA accounts for roughly half or more of all arthritis diagnoses. That places current OA prevalence well above 27 million, and likely in the 35–40+ million range in the U.S. today.

*https://pmc.ncbi.nlm.nih.gov/articles/PMC10578950/?utm_source=copilot.com



Arthritis (cont'd)

It is sometimes called degenerative joint disease or degenerative arthritis.

OA is most common in people older than 65.

Arthritis (cont'd)

Per the Arthritis Association, in OA, there is a breakdown in the cartilage covering the ends of bones where they meet to form a joint and allow movement.

As the cartilage wears away, the bones become exposed and rub against each other.

The deterioration of cartilage also affects the shape and makeup of the joint so that it no longer functions smoothly.

Arthritis (cont'd)

The most commonly affected joints are the lower back, hips, knees and feet. When those joints are affected, the resident may have difficulty with such activities as walking, climbing stairs and lifting objects.

Other commonly affected joints are the neck and fingers, including the thumb base. When finger and hand joints are affected, OA can make it difficult to grasp and hold objects, such as a pencil, or to do delicate tasks, such as needlework.

Arthritis (cont'd)

OA Symptoms:

- Stiffness, particularly first thing in the morning or after resting; and
- Pain



Arthritis (cont'd)

OA risk factors/causes:

- A genetic defect in joint cartilage;
- Getting older ("wear and tear");
- Being overweight;
- Having a joint injury;
- Having joints that are not properly formed (i.e., hip dysplasia); or
- Old sports injuries

Arthritis (cont'd)

Let's focus on one risk factor that can be controlled:

Weight: Hips and knees bear the brunt of the body's weight. Being overweight puts additional pressure on these joints. For every pound gained, knees gain 3 pounds of added stress; for hips, each additional pound translates into 6 times the pressure on these joints! Many years of carrying extra pounds can cause the cartilage that cushions the joints tends to break down.



Arthritis (cont'd)

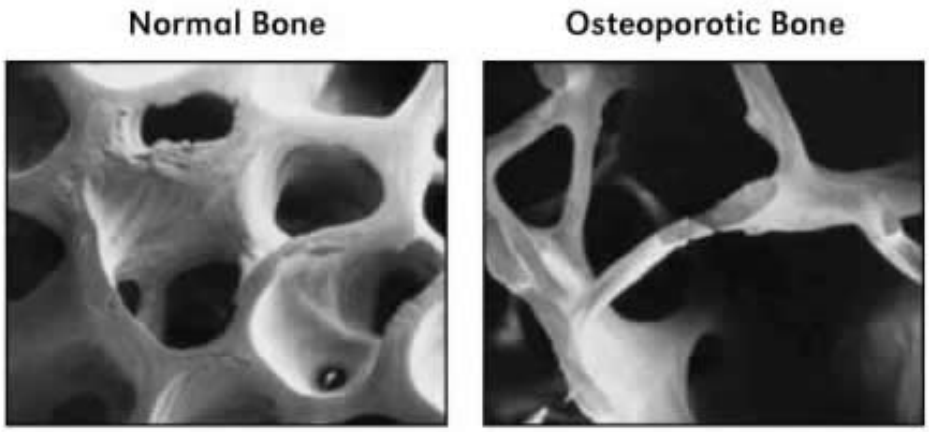
Pain relief:

While medications for pain relief are usually necessary, the most important treatment for osteoarthritis is living a joint-friendly lifestyle:

- maintaining a proper weight
- eating a healthy lifestyle
- avoiding additional joint damage
- relieving stress

Osteoporosis

Figure 2–5. Normal vs. Osteoporotic Bone



Note: These pictures, called scanning electron micrographs, are from biopsies of a normal and an osteoporotic patient. The normal bone shows a pattern of strong interconnected plates of bone. Much of this bone is lost in osteoporosis and the remaining bone has a weaker rod-like structure. Moreover some of the rods are completely disconnected. These bits of disconnected bone may be measured as bone mass, but contribute nothing to bone strength.

Source: Reproduced from J Bone Miner Res 1986: 1:16-21 with permission from American Society for Bone and Mineral Research.

Osteoporosis (cont'd)

Osteoporosis is a common and painful condition that weakens bones and increases the risk of unexpected fractures.

Many people do not realize they have osteoporosis until a sudden fall or strain causes a bone to break.

Over 10 million people in the US have osteoporosis.

Osteoporosis (cont'd)

The most common cause of osteoporosis pain is a *spinal compression fracture*. If a resident has been diagnosed with osteoporosis, or has several risk factors for osteoporosis, these symptoms may indicate a compression fracture:

- Sudden, severe back pain that gets worse when standing or walking
- Some pain relief when lying down
- Pain and difficulty in twisting or bending
- Loss of height
- Curvature of the spine – the "hump"

Osteoporosis (cont'd)

Osteoporosis can cause chronic pain.

Medication is the most popular way to manage osteoporosis pain. These can include:

- OTC pain medications like acetaminophen, aspirin, ibuprofen, and naproxen are safe pain relievers for most people, but they can cause stomach irritation and bleeding or liver problems in some people.

Osteoporosis (cont'd)

Drugs include (cont'd):

- Narcotics can help in the short-term with acute pain but should not be used for chronic pain.
- Calcitonin is an osteoporosis drug sold under the brand names *Miacalcin*, *Calcimar*, or *Fortical*. Calcitonin may help relieve pain associated with bone fractures.



Osteoporosis (cont'd)

Pain relief can also be found through:

- Physical therapy
- Heat and cold treatment
- Acupuncture, acupressure or massage therapy
- Braces or supports

Headache/Migraines

- Headaches are one of the most chronic pain conditions and 45 million Americans suffer from chronic headaches, according to the American Chronic pain Association.

7 in 10 people have at least one headache a year.

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Headaches/ Migraines (cont'd)

Migraines are painful headaches often accompanied by nausea, vomiting, and sensitivity to light.

Migraines have a tendency to run in families. 4 out of 5 migraine sufferers have a family history of migraines. If one parent has a history of migraines, the child has a 50% chance of developing migraines, and if both parents have a history of migraines, the risk jumps to 75%!

Headaches/Migraines (cont'd)



Migraine symptoms:

- Moderate to severe pain (often described as pounding, throbbing pain) that can affect the whole head, or can shift from one side of the head to the other
- Nausea or vomiting, stomach upset, abdominal pain
- Sensitivity to light, noise or odors
- Blurred vision
- Loss of appetite
- Fatigue
- Dizziness

Headaches/ Migraines (cont'd)

Possible causes:

- Caffeinated drinks – too much caffeine can bring on a migraine.
- Irregular sleep schedule – sleeping in one day, waking up early the next, etc.
- Too little sleep.
- Consuming chocolate, sour cream, nuts, citrus fruits, foods containing MSG, etc.

Headaches/Migraines (cont'd)

Migraine pain relief:

Headache pain may need to be managed with medications, which can be grouped into three different categories:

Symptomatic relief: These are drugs used to treat the headache pain or accompanying symptoms of migraines like nausea.

Abortive therapy: These are drugs used to stop a migraine headache.

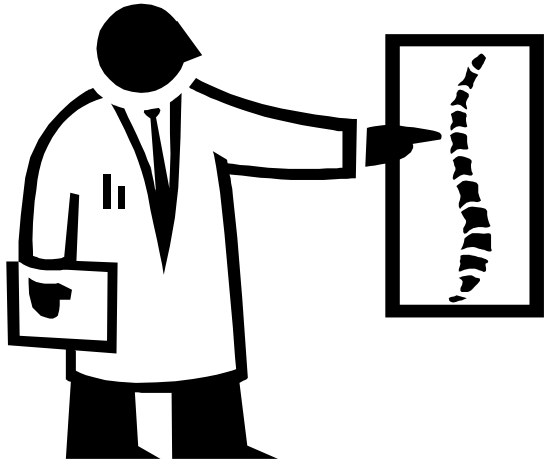
Preventive therapy: These are drugs used to prevent a migraine.

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Back Pain

How many times in your life have you said

"Oh, my aching back!"





Back Pain (cont'd)

Back pain can be caused by many things – and the pain can be acute or chronic:

- Arthritis
- Herniated discs
- Osteoporosis
- Degenerative disc disease
- Sciatica

Back Pain (cont'd)

The back and spine are two of the strongest parts of the human body.

The spine provides the body with strength and flexibility and also surrounds and protects the spinal cord and nerves.

The normal adult spine has 32 vertebrae (the bones in the spine), each stacked on top of each other.

Back Pain (cont'd)

Some people are more inclined to have back pain than others. They include:

- Tall people
- Overweight or obese people
- People who smoke
- People with poor muscle strength in the lower back and abdomen

Back Pain (cont'd)

Elderly people with back pain most commonly have what is called uncomplicated mechanical low back pain.

The discomfort tends to localize to the lower back area and worsens with stretching, twisting, walking, or bending.

The pain may cause aching in the buttock or thigh and rarely radiates below the knee. It is relieved by rest if the person can find a comfortable position in bed.



Back Pain (cont'd)

Treatments for back pain:

1. Pain relievers or other meds
2. Chiropractic care
3. Heat and cold therapy
4. Acupuncture and acupressure
5. Massage
6. Physical therapy

Cancer Pain

- There are more than 100 different types of cancer – and cancer can lead to severe, long-term pain.
- According to the National Cancer Institute, 70-90% of people with advanced cancer have pain, and about 33% of people with early cancers also have pain.
- In general, the painful cancers are those that cause tumors.

Cancer Pain (cont'd)



- Cancer pain can be acute or chronic.
- Chronic pain is pain caused by changes to nerves. Nerve changes may occur due to cancer pressing on nerves or due to chemicals produced by a tumor, but it can also be caused by nerve changes due to cancer treatment.
- Bone pain is also common to advanced cancer and can be chronic.

Cancer Pain (cont'd)

Cancer pain treatments:

Cancer pain is usually treated with analgesic medications.

There are also non-drug methods, such as massage, acupuncture, biofeedback, hypnosis, that can be used along with the pain medications to obtain additional relief.

Sometimes surgery, radiation therapy, or other treatments are used to shrink the tumor if it is pushing on organs, bone, or nerves and causing pain.

Treatments for Pain

Now that we have identified *what* could cause pain, we will discuss the many different types of treatments available, focusing mainly on medications available and commonly prescribed for pain.





Pain Medications

There are many pain medications available, ranging from simple over-the-counter Advil to morphine.

As we discussed earlier in this course, it is important that the pain reliever match the condition causing the pain. If you see that your resident is not getting relief, you must notify their physician.

Pain Medications (cont'd)

Pain relievers are often referred to as *analgesics* or *analgesia*.

For someone in low to moderate pain, an OTC (see next slides) might be prescribed; with moderate pain, the treatment might be with opioid painkillers, such as codeine. For ongoing or severe pain, the physician might prescribe morphine type opioid painkillers.

Pain Medications (cont'd)

- Over-the-counter (OTC) medicines are good for many types of pain.
- There are two main types of OTC pain medications: acetaminophen (Tylenol) and nonsteroidal anti-inflammatory drugs (NSAIDs).
- Aspirin, naproxen (Aleve) and ibuprofen (Advil, Motrin) are examples of OTC NSAIDs. Many NSAIDs are available at prescription doses.

Pain Medications (cont'd)

- Narcotics are a group of substances that contain pain relievers known as opioids.
- There are short-acting opioids and long-acting opioids.
- The most common opioids include morphine, Vicodin, OxyContin and Methadone.



Pain Medications (cont'd)

Let's go back to the over-the-counter pain relievers:

<u>Acetaminophen:</u>



- Brand name is *Tylenol*.
- It works by raising the pain threshold – so one can tolerate a greater amount of pain before they feel it.
- Also used to reduce fever.
- Dangerous for heavy drinkers – can be toxic to the liver.

Pain Medications (cont'd)

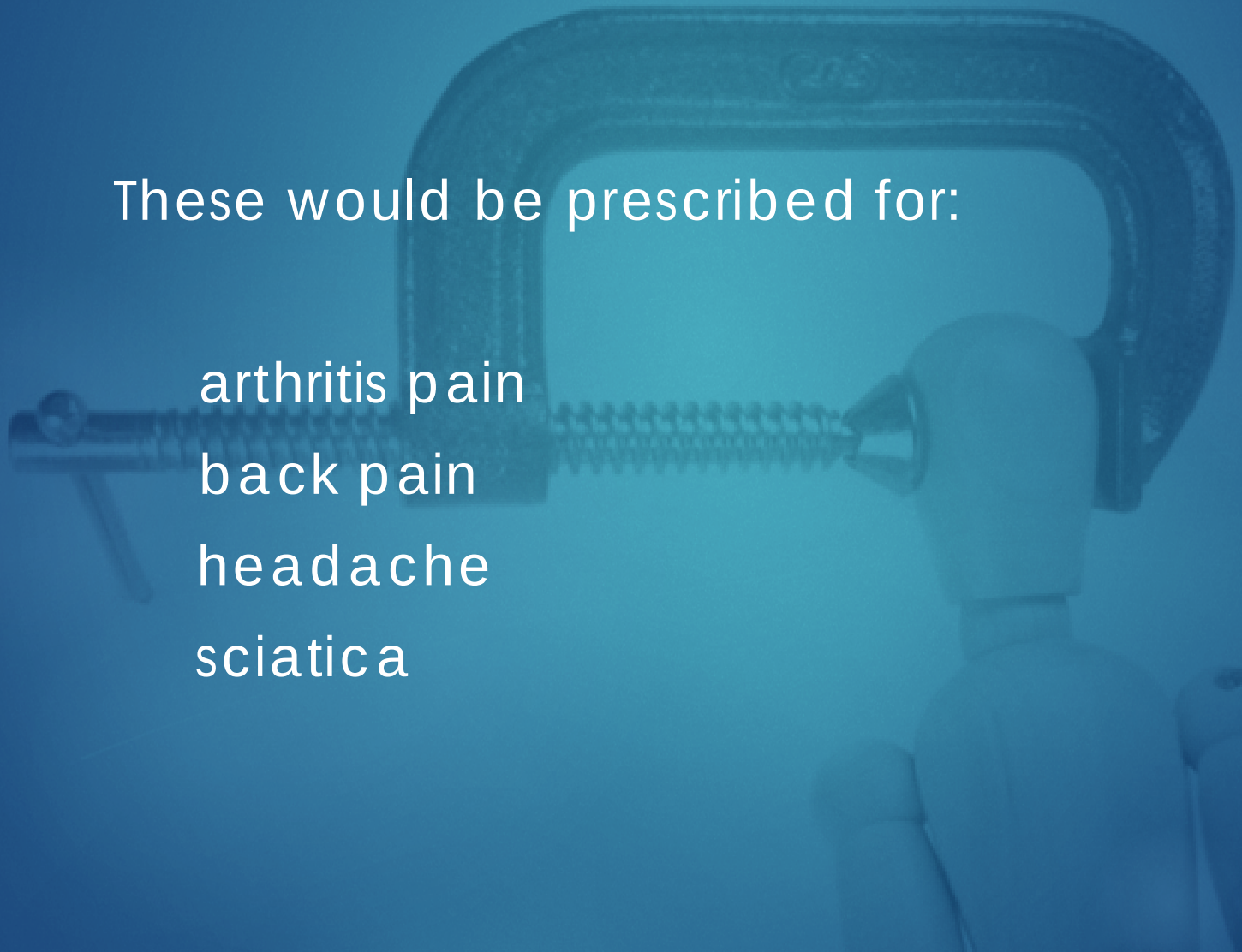
Let's go back to the over-the-counter pain relievers:

<u>Nonsteroidal anti-inflammatories:</u>

- Known as NSAIDs.
- Reduces pain, fever and inflammation.
- Aspirin and ibuprofen (Advil) are the best known.
- They may cause stomach ulcers or heartburn.
- Taking ibuprofen and alcohol together can cause bleeding in the stomach and intestines.



Pain Medications (cont'd)



These would be prescribed for:

- arthritis pain
- back pain
- headache
- sciatica

Medications and Seniors

Although there are a number of pain relievers that are safe for older people, doctors must take special precautions when prescribing pain medication; older patients handle pain medication differently than younger patients.

For example, because kidneys become smaller with age, there is decreased blood flow and less effective filtration (removal of the drug). In addition, the liver undergoes a decrease in mass and blood flow with aging, making it harder for the liver to break down some medications.

Medications and Seniors (cont'd)

The way drugs are administered to older people also can become a challenge. Decreased saliva may interfere with swallowing, and injections may be more difficult in decreased muscle mass. Also, oral drugs may be absorbed differently because of changes in stomach acid levels.

To overcome these challenges, doctors often start their older patients on the lowest recommended dose and then increase the amount of medication if necessary.

Pain at End of Life

Pain associated with the dying process may or may not be related to the pain of an individual's chronic condition.

Physical pain is not universal with every death, but discomfort is usually present.

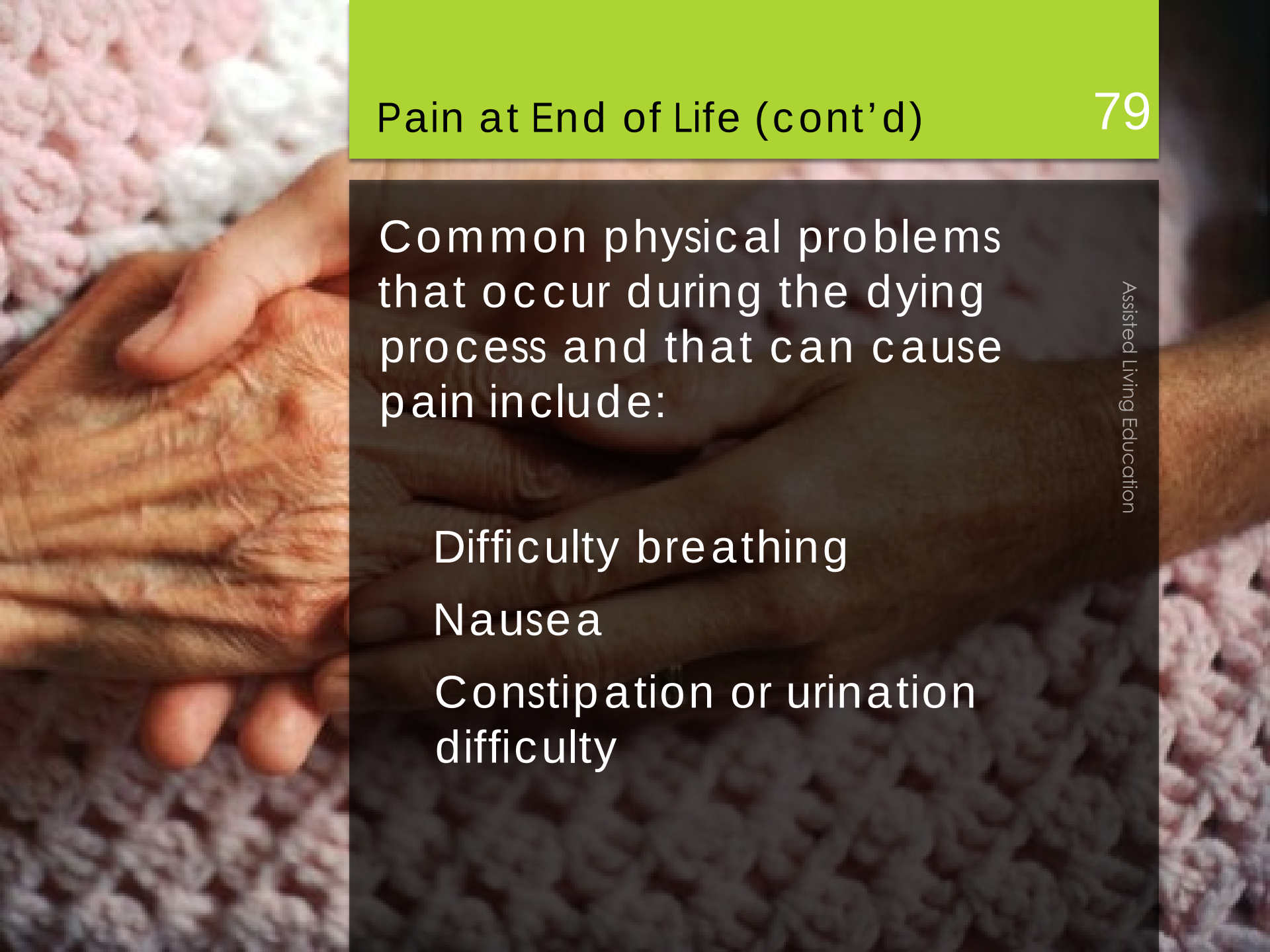
It is so important to have a good hospice team available for the resident.

Pain at End of Life (cont'd)

Effective pain management at the end of life applies the concept of total pain.

Before physicians prescribe pain relievers, an assessment is required to determine the nature of the pain and how it can best be eliminated or reduced.





Pain at End of Life (cont'd)

Common physical problems that occur during the dying process and that can cause pain include:

- Difficulty breathing
- Nausea
- Constipation or urination difficulty

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Conclusion

Remember, pain is very subjective – it cannot be verified. You must rely on what the resident tells you.

If a resident states that they are in pain, you must believe them. Call their physician, hospice nurse, mental health provider, dentist – whomever the appropriate person is - and help them find relief!

Sources

Department of Social Services

National Institutes of Health

Arthritis Association

National Hospice and Palliative Care Organization

The American Chronic Pain Association
www.theacpa.org

The Mayo Clinic
www.mayoclinic.com

Web MD
www.webmd.com

International Association for the Study of Pain

Conclusion



Assisted Living Education thanks you for attending this course.

We look forward to seeing you again at another of our courses!