

7 SICKNESS AND HEALTH

7.1. chronic diseases and quality of life

Illnesses are classified as either acute or chronic. An acute illness lasts for a short period of time and may go away without any intervention, the assistance of medications, and/or surgery. Chronic illness is classified as an illness that recurs or persists for a long period of time and may last for a person's entire life. According to the Centers for Disease Control and Prevention (CDC), chronic diseases are among the most common, costly, and preventable of all health problems. More than 1.7 million people die of a chronic disease each year in the United States. Additionally, approximately 80% of older adults have at least one chronic illness, and at least 50% have at least two. Unfortunately, chronic conditions may lead to pain and disability, which may result in a lower quality of life.

BACKGROUND

Illnesses are classified as either acute or chronic. An acute illness lasts for a short period of time and may go away without any intervention, the assistance of medications, and/or surgery. Chronic illness is classified as an illness that recurs or persists for a long period of time and may last for a person's entire life. According to the Centers for Disease Control and Prevention (CDC), chronic diseases are among the most common, costly, and preventable of all health problems. More than 1.7 million people die of a chronic disease each year in the United States. Additionally, approximately 80% of older adults have at least one chronic illness, and at least 50% have at least two. Unfortunately, chronic conditions may lead to pain and disability, which may result in a lower quality of life.

The list of chronic illnesses is extensive, but some examples include heart disease, diabetes, cancer, obesity, and AIDS. The healthcare costs of individuals with chronic diseases accounts for over 75 percent of the nation's medical care costs.

These illnesses may be improved through lifestyle modifications such as diet and exercise, in addition to medication. Additionally, patients suffering from chronic conditions may need hospice care if they are not expected to live beyond six months. The goal of hospice care is to improve the patient's quality of life by treating the person rather than the disease.

Quality of life is a term used to describe different parts of an individual's health and well-being, including physical, mental, psychological, and social components. The goal of health assessment for older adults is to promote well-being.

RISK FACTORS

Unhealthy diet, lack of exercise, and smoking are risk factors for many chronic diseases. Additionally, increased blood sugar, elevated blood pressure, and obesity may contribute to chronic illness. These are examples of modifiable risk factors, which individuals have the ability to change.

As individuals age, their risk of developing a chronic illness increases.

Individuals affected by poverty may be more likely to develop a chronic illness since access to healthcare services may be difficult.

CAUSES

Disabilities: According to the American Geriatrics Society, approximately half of all people who live in nursing homes are at least 85 years old. Additionally, the majority of individuals have some form of disability or impairment with activities of daily living (e.g. walking, bathing).

Terminal illness: Individuals who suffer from a terminal illness (an illness for which there is little or no chance of recovery and that will most likely cause death in the immediate future) may receive hospice care to manage pain (palliative care) rather than prolong life. According to the American Geriatrics Society, individuals are eligible for hospice care if they are expected to live six months or less.

SIGNS AND SYMPTOMS

Pain can occur in many locations throughout the body. Pain can be constant or intermittent (off and on). Intensity can vary from a dull ache to searing agony. The onset may be sudden and acute, or gradual and chronic (long term), both occurring with or without apparent reason.

Chronic pain persists for greater than three months. The term usually describes pain that persists for more than one month beyond the usual course of an illness or injury, pain that recurs off and on for months or years, or pain that is associated with a chronic disorder such as cancer. Usually, chronic pain does not affect the heartbeat, breathing rate, blood pressure, or pupils, but it may result in other problems, such as depression, disturbed sleep, decreased energy, loss of appetite, weight loss, and loss of interest in sexual activity.

Many individuals who are being treated for chronic pain may experience a brief, often severe flare-up of pain. This flare-up is called breakthrough pain because it breaks through the regularly scheduled pain medication therapy. Typically, breakthrough pain begins suddenly, lasts up to one hour, and feels much like the individual's chronic pain except it is more severe. Breakthrough pain may differ

from one individual to another and is often unpredictable. Improper pain control is the main cause of breakthrough pain.

DIAGNOSIS

General: Quality of life describes the overall health and well-being beyond the traditional measures of disease. Additionally, it includes the physical, mental, psychological, and social aspects of an individual's life. However, quality of life may have different meanings to people.

Physical function: Activities of daily living, such as bathing and eating, play an important part of an individual's quality of life. Unfortunately, patients with disabilities may have difficulties performing activities of daily living. Healthcare professionals may observe various tasks such as walking ability and balance. Patients should wear appropriate footwear (e.g. comfortable flat hard-soled shoes) during the assessment so the doctor may determine whether the problem is physical or related to the shoes.

Psychological function: Many older adults affected by a chronic illness may suffer from depression. Individuals suffering from depression are at an increased risk of developing physical disabilities. Doctors should ask patients if they feel sad or depressed so that they may receive appropriate treatment.

Social: Doctors should be aware of a patient's social needs. Different factors should be addressed including the availability of family and friends to provide personal support, the need for a caregiver, and the general financial situation of the person.

COMPLICATIONS

Daily activities: Chronic diseases may lead to physical and financial limitations. Family members may need to care for patients and help with daily activities, which may ease some of the burden.

Depression: Approximately one-third of individuals with a serious medical condition experience symptoms of depression. The illness may affect a person's way of life and ability to function. This may lead to feelings of sadness and helplessness.

Stress: Prolonged stress may lead to frustration, anger, hopelessness, and, at times, depression.

TREATMENT

General: It is important for individuals to understand the goals of treatment. The treatment can either be palliative, which helps control symptoms (such as pain), or curative, which may help cure the disease and decrease the chances of it returning.

An additional goal of treatment is to increase the quality of life for the individual suffering from the chronic illness.

Coping: Support groups provide patients, family, and friends with support and ways of dealing with the emotional situations. Support groups for patients can be located by asking a healthcare provider, such as a doctor or social worker, or searching online.

Hospice: Palliative or hospice care is a comprehensive approach to treating the symptoms of illness when a cure is not possible and patients are not expected to live beyond six months. This type of care focuses on the physical, psychological, and spiritual needs of the patient and improving the patient's quality of life by relieving suffering and controlling pain. Healthcare professionals and volunteers provide care for hospice patients in the following settings: home, hospice center, hospital, or skilled nursing facility. Hospice care treats the person rather than the disease, focusing on quality instead of length of life. Additionally, the hospice care team works with family members to provide comfort and support during the grieving process. These services are typically provided for the family for at least thirteen months after the patient's death.

Pain medications: For moderate to severe pain, opioid (narcotic) medications may be given. These drugs include morphine (MS Contin[®]), fentanyl (Duragesic[®]), hydromorphone (Dilaudid[®]), and oxycodone (Percocet[®], Oxycontin[®]). Individuals must have a prescription for these medications, and the medications are generally time-released, meaning their effects last more than a few hours. Non-opioids may be used along with opioids for moderate to severe pain. These may include but are not limited to medications used to treat seizures, non-steroidal anti-inflammatory drugs (Motrin[®]), depression medications, as well as additional drugs that can also work to help with chronic pain. Opioid medications may cause side effects such as drowsiness and constipation.

Their use may also cause both physical and psychological dependence in a short length of time. Based on expert opinion, patients should not be afraid to take these medications due to the risk of dependence since untreated extreme pain may lead to many problems such as anxiety, depression, and lack of sleep. However, doctors should emphasize the risk of dependence. If a patient wants to stop taking these medications, the doctor should be involved so that it is done safely. For breakthrough pain (pain that breaks through the regularly scheduled medication therapy), immediate-release opioids may be given, such as oral morphine (Oramorph[®]) or oxycodone (Roxicodone[®]). A prescription is required for these medicines. A short-acting opioid, which relieves breakthrough pain quickly, needs to be used with a long-acting opioid for persistent pain. It is important for patients

to tell a doctor or pharmacist if they are taking any over-the-counter (OTC) medications, as some OTC medicines may contain acetaminophen (Tylenol®). Some prescription pain medications, such as oxycodone/acetaminophen combination (Percocet®) or hydrocodone/acetaminophen (Lortab®, Vicodin®), may also contain acetaminophen, thereby increasing the potential for acetaminophen induced liver toxicity. Additionally, hydrocodone and oxycodone are not forms of codeine. Based on expert opinion, other non-narcotic drugs will likely be used to help manage the pain.

INTEGRATIVE THERAPIES

Good scientific evidence:

Music therapy: Quality of life is a broad concept comprising morale, mood, self-esteem, daily functioning, pain, general well-being, life satisfaction, and related issues, such as suffering. Music therapy has been associated with improved quality of life in a variety of populations, usually based on regular group sessions over several weeks. Benefits to quality of life from such an approach have been seen in cancer patients, seniors with emphysema, older adults in long-term care, hospice patients, and multiple sclerosis.

Pet therapy: Pet therapy may benefit both patients and care giving staff in a hospice setting. In one study, the presence of a dog was found to encourage staff-patient interactions, ease patient-visitor relations, and improve staff and patient morale. The preferred interactions with the dog were those that had a relaxing or comforting effect on the human. Not all patients, however, may be interested in contact with an animal.

Unclear or conflicting scientific evidence:

Aromatherapy: Aromatherapy is often used in people with chronic illnesses (frequently in combination with massage), with the intention to improve quality of life or well-being. There is not enough scientific evidence in this area to form a firm conclusion about the effectiveness of aromatherapy.

Chamomile: A small amount of research suggests that massage using chamomile essential oil may improve anxiety and quality of life in cancer patients. However, this evidence is not high quality. Additional study is needed before a firm conclusion can be reached.

Ginkgo: Early studies suggest that ginkgo may aid in quality of life. More randomized controlled trials are needed before a conclusion can be made.

Ginseng: Preliminary research of Siberian ginseng (*E. senticosus*) administration in the elderly suggests that some aspects of mental health and social functioning (and

overall health-related quality of life) may improve after four weeks of therapy, although differences appear to attenuate with continued use. Additional study is necessary in this area before a firm conclusion can be reached.

Several studies have examined the effects of ginseng (with or without multivitamins) on overall well-being in healthy and ill patients, when taken for up to 12 weeks. Most trials are not high quality, and results are mixed. However, it remains inconclusive if ginseng is beneficial in this area.

Guided imagery: Preliminary studies suggest that quality of life and sense of comfort may be improved by guided imagery techniques such as relaxation/imagery training tapes. Initial evidence also suggests that occasional use of guided imagery techniques may improve quality of life in people with HIV. Further research is needed before a firm conclusion can be drawn.

Lavender: Preliminary evidence has shown that lavender oil in combination with grapeseed oil used in a bath may help to improve overall well-being and decrease anger and frustration. Lavender oil used as aromatherapy has also been shown to increase overall mood. Further well-designed research is needed to confirm these results.

Massage: Hand massage did not appear to alter comfort levels or satisfaction with care in nursing home residents in one study. Larger, well-designed studies are needed before a recommendation can be made.

Various forms of massage are often used in patients with cancer, with the aim to improve well-being and reduce anxiety. There is limited research in this area. Although there are many anecdotal reports of benefits, there is not sufficient scientific evidence to draw a firm conclusion in this area.

Meditation: Study results are mixed. Additional research would be necessary in order to form a firm conclusion in this area.

Physical therapy: There is insufficient available evidence in this specific area. Additional studies are needed.

Polarity therapy: One preliminary study showed that polarity therapy may improve self-reported fatigue and quality of life. More research is needed in this area.

Prayer: There are numerous studies on the effects of intercessory prayer (praying on behalf of patients) on illness severity, death, and well-being of patients or loved ones. Results are variable, with some studies reporting benefits of prayer on severity or length of illness, and others suggesting no effects. Most research has not been well designed or reported, and as a result, a firm conclusion is not possible. Additional research is needed in this area with clear descriptions of

prayer techniques and well-defined health outcomes. Several studies in which patients knew that prayers were being said on their behalf report benefits, although it is not clear that prayer is superior to other forms of compassionate interaction.

Limited study reports improved quality of life in patients who desire others to pray for them and receive healing. Better quality research is necessary before a firm conclusion can be drawn.

Qi gong: Qi gong may be beneficial for improving the quality of life in cardiac and cancer patients; further study is necessary to make a firm conclusion.

Reflexology: Preliminary research reports no difference between reflexology and standard foot massage in palliative care cancer patients. Better research is necessary in this area before a firm conclusion can be drawn.

Reiki: Reiki has been used or suggested for the management of many conditions. However, Reiki is not well studied scientifically. There are several challenges to conducting high quality research on techniques such as Reiki: there are different styles of practice with variation from practitioner to practitioner; it is challenging to design studies with "placebo" Reiki; and there is not widespread agreement on how best to measure outcomes. Better research is needed before a recommendation can be made either for or against the effectiveness of Reiki for any specific condition.

Selenium: Studies of selenium supplementation for mood elevation and quality of life yield mixed results. Further research is needed before a firm conclusion may be reached.

Spiritual healing: Different forms of spiritual healing have been studied for a variety of illnesses. Some studies report benefits of spiritual healing (such as faster recovery or better quality of life), while other studies do not provide clear answers. Most trials have not been well designed or reported. Researchers have tried to combine the results of these studies to draw a firmer conclusion, but due to design differences between studies, this has not been possible. Therefore, from a scientific perspective, it remains unproven if spiritual healing, distant healing, prayer, and related techniques are beneficial to individuals with medical conditions.

Tai chi: Tai chi has been studied in individuals living with various stages of HIV disease. Preliminary study shows it may be helpful for stress and improving quality of life, but additional research is needed before a recommendation can be made.

Several studies suggest that tai chi may improve heart and lung fitness, muscle strength, handgrip strength, flexibility, gait, coordination, and sleep and may decrease the risk of osteoporosis. It is not clear if these benefits are different from other forms of exercise. Nearly all of the studies that exist in these areas compare

tai chi programs with a sedentary lifestyle, not with another form of exercise. Tai chi has been found to be of low to moderate intensity in the cardiovascular studies thus far, which makes tai chi a candidate for certain rehabilitation programs. Additional research is needed before a recommendation can be made.

Therapeutic touch: Early research suggests that therapeutic touch may improve well-being in advanced cancer patients. Pain, anxiety, depression, and fatigue have been reported as improved in patients receiving therapeutic massage and healing touch. More studies are necessary to confirm these results.

Yoga: Yoga may be beneficial for improving quality of life in the healthy elderly, although further study is needed to make a firm conclusion.

Traditional or theoretical uses lacking sufficient evidence:

Chinese medicine: Theoretical evidence suggests that Chinese medicine may improve quality of life.

Relaxation therapy: Theoretical evidence suggests that relaxation therapy may improve quality of life by decreasing stress.

PREVENTION

Patients may decrease their risk of developing a chronic illness by adopting a healthy lifestyle, avoiding tobacco use, increasing physical activity, achieving optimal weight, improving nutrition, and avoiding sun exposure.

Being proactive about one's health and visiting the doctor for regular screenings is extremely important.

Regular physical activity reduces the risk for developing many conditions. Exercise has additional benefits including the following: weight control, healthy bones, reducing falls, and reducing anxiety and depression symptoms.