COURSE #77033 — 5 CLOCK HOURS Release Date: 10/01/24 Expiration Date: 09/30/27

The Intersection of Pain and Culture

HOW TO RECEIVE CREDIT

- Read the enclosed course.
- Complete the questions at the end of the course.
- Return your completed Answer Sheet to NetCE by mail or fax, or complete online at www.NetCE.com. Your postmark or facsimile date will be used as your completion date.
- Receive your Certificate(s) of Completion by mail, fax, or email.

Faculty

Alice Yick Flanagan, PhD, MSW, received her Master's in Social Work from Columbia University, School of Social Work. She has clinical experience in mental health in correctional settings, psychiatric hospitals, and community health centers. In 1997, she received her PhD from UCLA, School of Public Policy and Social Research. Dr. Yick Flanagan completed a year-long post-doctoral fellowship at Hunter College, School of Social Work in 1999. In that year she taught the course Research Methods and Violence Against Women to Masters degree students, as well as conducting qualitative research studies on death and dying in Chinese American families.

Previously acting as a faculty member at Capella University and Northcentral University, Dr. Yick Flanagan is currently a contributing faculty member at Walden University, School of Social Work, and a dissertation chair at Grand Canyon University, College of Doctoral Studies, working with Industrial Organizational Psychology doctoral students. She also serves as a consultant/subject matter expert for the New York City Board of Education and publishing companies for online curriculum development, developing practice MCAT questions in the area of psychology and sociology. Her research focus is on the area of culture and mental health in ethnic minority communities.

Faculty Disclosure

Contributing faculty, Alice Yick Flanagan, PhD, MSW, has disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

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Division Planner/Director Disclosure

The division planner and director have disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Audience

This course is designed for mental health professionals who may intervene to improve the treatment of pain in diverse patient populations.

Accreditations & Approvals

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A complete Works Cited list begins on page 26.

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NetCE designates this continuing education activity for 5 CE credits.

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About the Sponsor

The purpose of NetCE is to provide challenging curricula to assist healthcare professionals to raise their levels of expertise while fulfilling their continuing education requirements, thereby improving the quality of healthcare.

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Disclosure Statement

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Course Objective

The purpose of this course is to increase professionals' knowledge and awareness of the impact of culture on issues of pain and pain management in order to improve the provision of care and patients' quality of life.

Learning Objectives

Upon completion of this course, you should be able to:

1. Define pain.
2. Discuss the changing demographic trends that contribute to the United States' multicultural landscape.
3. Define culture, race, and ethnicity.
4. Analyze how culture, race and ethnicity influence how pain is defined, expressed, and experienced.
5. Discuss how different racial and ethnic minority groups utilize different terms for pain.
6. Identify how different racial and ethnic minority groups respond to and cope with pain.
7. Explain how different racial and ethnic minority groups seek help with pain.
8. Discuss the factors that contribute to racial and ethnic disparities in pain management.
9. Identify pain rating scales and instruments and how culture influences these rating scales.
10. Discuss best practice guidelines for assessments and interventions that are culturally relevant and competent.

EVIDENCE-BASED PRACTICE RECOMMENDATION

Sections marked with this symbol include evidence-based practice recommendations. The level of evidence and/or strength of recommendation, as provided by the evidence-based source, are also included so you may determine the validity or relevance of the information. These sections may be used in conjunction with the course material for better application to your daily practice.

INTRODUCTION

Patients' experiences of pain may be frustrating if they defy biomedical explanation, and the treatment of pain tends to be stigmatized [1]. When culture, race, and ethnicity are taken into consideration, the treatment of pain becomes even more complex. Practitioners should address how patients construct the meaning and experiences of pain rather than simply dealing with a set of medical procedures and routines [1].

Pain is universal. It is not solely a physiological response, and culture influences how patients ascribe meaning to, experience, express, cope with, and seek treatment for pain [2]. Research has found that culture, family beliefs, and religion all affect how patients manage, express, experience, and perceive the sensation of pain [3; 39]. In some cultures, stoicism is highly valued, making patients less likely to verbally or behaviorally express pain, in part because pain is viewed as private [134]. Culture also plays a role in how much pain individuals perceive as tolerable and how they report pain [16]. Consequently, culturally competent and sensitive practice is essential for practitioners caring for patients who experience pain. It is inevitable that practitioners will work with patients and families who are from different racial and ethnic backgrounds. However, many practitioners are more comfortable taking a traditional biomedical perspective to pain and imposing a mechanistic diagnostic process. The result can cause tension between the patient and the practitioner [4].

This course will provide an overview of how different cultural groups respond to, experience, construct meaning to, and cope with pain. The focus will be on the general concept of pain, although there are many different types of pain and the dynamics for each type may be different. In addition, this course will focus on adults' (rather than children's) experiences with pain. Finally, pain disparities and factors that promote these disparities will be explored. This knowledge should assist practitioners to develop and implement culturally competent practice guidelines when working with racially and ethnically diverse patients who experience pain.

AN OVERVIEW OF PAIN

In ancient times, pain was considered an emotion; Aristotle referred to it as a passion of the soul [5]. The International Association for the Study of Pain (IASP) defines pain as "an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage" [6]. In 2020, the IASP expanded this definition with the addition of six key notes for further valuable context [6]:

- Pain is always a personal experience that is influenced to varying degrees by biologic, psychological, and social factors.
- Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons.
- Through their life experiences, individuals learn the concept of pain.
- A person's report of an experience as pain should be respected.
- Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being.
- Verbal description is only one of several behaviors to express pain; inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain.

Pain can be further categorized as acute (sudden and usually short-lived) or chronic (lasting three months or longer). Acute pain is the most common reason for emergency department visits [7]. High-impact chronic pain is pain that is chronic (i.e., experienced more often than not during the past three months) and that limits work and activities [156]. The temporal label to the term "chronic pain" has resulted in some controversy. Some maintain that this definition does not provide a comprehensive picture of the situation and the underlying dynamics, which involve a range of biological, psychological, social, and cultural factors [180]. The term can also lead to tension between providers and patients, with the provider at times assuming the patient is exaggerating or seeking a sick role [180]. It is important to remember that pain is not necessarily pathologic. Pain is the body's way of alerting that something is wrong and help is needed. When viewed in this way, pain facilitates healing [28].

Unfortunately, chronic pain is a common problem. Globally, it is estimated that 20% of adults experience pain, and every year, 1 in 10 adults are diagnosed with chronic pain [8]. On a worldwide basis, there are 1.9 billion individuals who experience recurrent, tension-based headaches—the most common type of chronic pain [18]. A 2023 study estimated that 21% of adults have chronic pain and 8% have high-impact chronic pain [156]. New cases of chronic pain among U.S. adults occur more often than other common conditions, including diabetes, hypertension, and depression [156]. This finding is consistent with previous findings that an estimated 20.4% of American adults report experiencing chronic pain in the past three months [19]. In the United States, the most common types of chronic pain are back pain (affecting 10.1% of adults), lower extremity pain (4.1%), upper extremity pain (4.1%), and headache (3.5%) [9; 181].

Women in the United States are more likely than men to experience headaches, abdominal pain, and chronic widespread pain. Women are also more likely to report higher pain intensity than men, and young girls are more likely to experience pain in multiple areas compared with boys [27]. Reports of chronic pain differ among racial and ethnic minority groups. In one study, Asian Americans had the lowest prevalence of pain (2.4%), while Native Americans had the highest (11.1%) [182]. By comparison, the prevalence of pain is 6.8% for White Americans, 7.6% for Black Americans, and 5% for Hispanic Americans. Roughly 23.5% of non-Hispanic White adults have chronic pain, compared with 6.8% Asian adults and 19.3% African Americans [19]. In one survey, Mexican Americans and African Americans had lower rates of back pain, leg and feet pain, and arm and hand pain compared to their White counterparts [9].

Pain can affect many aspects of a patient's life. More than 25% of adults with chronic pain indicate that their pain has had an adverse impact on their employment [10]. Approximately 75% of individuals with high-impact chronic pain are unemployed [183]. It is estimated that chronic pain results in costs of $635 billion annually, including more than $60 billion in lost productivity alone [11; 32]. Direct healthcare costs are estimated to be up to $300 billion [30]. This is more than the costs of cancer, heart disease, and diabetes combined. Pain also affects the emotional and psychologic domains of an individual's life. Those who experience chronic pain are at increased risk for a variety of psychiatric problems, including substance abuse, depression, and anxiety. For example, patients with migraines are two to four times more likely to have depression than those without migraines [12]. Migraine also more than doubles the risk of anxiety disorder and agoraphobia or panic disorder and increases the likelihood of alcohol use disorder [13].

THE UNITED STATES: A MULTICULTURAL LANDSCAPE

The U.S. Census uses a variety measures to capture national diversity. One approach is the diversity index, which is a calculation that tells us how likely two people chosen at random will be from a different race and ethnicity groups. The index ranges from 0 to 100, whereby 0 signifies a lack of diversity and 100 indicates greater diversity [184]. The diversity index for the total U.S. population is 61.1%, which means there is 61.1% chance that any two people chosen at random are from different racial or ethnic groups [184]. In 2010, the U.S. diversity index was 54.9%.

According to U.S. Census data, the minority population is growing each year. By 2060, the minority population is expected to increase to 241 million, with the Hispanic population growing by 142%, the Asian population by 116%, and the African American population by 50% [14]. Hawaii, New Mexico, California, the District of Columbia, and Texas are regions in the United States that consist of a "majority-minority," meaning that more than half of the areas' populations consist of individuals who are racial/ethnic minorities [15]. With the increase of immigration and the slower birth rate in White families, it is anticipated that the United States is rapidly moving toward becoming a majority minority [15]. As of 2022, 63.7 million people in the United States identified as Hispanic, and they are the largest racial/ethnic minority group [185]. The Hispanic or Latino population is expected to increase from 19.1% in 2022 to 26.9% by 2060 [186].

AFRICAN AMERICANS

"African American" is a classification that serves as a descriptor; it has sociopolitical and self-identification ramifications. The U.S. Census Bureau defines African Americans or Black Americans as persons "having origins in any of the Black racial groups of Africa" [17].

According to the U.S. Census, African Americans number 49.6 million as of 2021 [31]. The state with the largest African American population, numbering at 3.9 million, is Texas [187]. By 2060, it is projected they will comprise 17.9% of the U.S. population [31]. In terms of a metropolitan city in the United States, New York City had the largest concentration of African Americans in 2022, numbering at 3.6 million [188]. This group tends to be young; in 2022, the median age of this population was 32.1 years, compared with a nation median age of 38 years [188]. In terms of educational attainment, 90.3% of those 25 years of age and older have a high school diploma or have completed college [31].

ASIAN AMERICANS

As of 2021, 24.0 million Americans identified as Asian [189]. California had the largest concentration of Asians (6.5 million) followed by New York (1.8 million) [57]. Between 2000 and 2019, Asians experienced the greatest growth (81%) compared with any other racial group [133]. Between 2016 and 2017, this group had the highest growth rate at 3.0% [132]. The Chinese group represents the largest Asian subgroup in the United States, and it is projected that this population will grow to 35.7 million between 2015 and 2040 [20; 21]. In 2021, Chinese Americans numbered 5.2 million; this number does not include Taiwanese individuals [189]. They also have the highest educational attainment of any racial/ethnic group; 55.1% of Asian Americans 25 years of age and older have a bachelor's degree or higher [189].

"Asian" is a single term widely used to describe individuals who have kinship and identity ties to Asia, including the Far East, Southeast Asia, and the Indian subcontinent [22]. This encompasses countries such as China, Japan, Korea, Vietnam, Cambodia, Thailand, India, Pakistan, and the Philippines. Pacific Islander is often combined with Asian American in census data. The Pacific Islands include Hawaii, Guam, Samoa, Fiji, and many others [22]. There are more than 25 Asian/Pacific Islander groups, each with a different migration history and widely varying sociopolitical environments in their homelands [23].

Asian American groups have differing levels of acculturation, lengths of residency in the United States, languages, English-speaking proficiency, education attainment, socioeconomic statuses, and religions. For example, there are approximately 32 different languages spoken among Asian Americans, and within each Asian subgroup (e.g., Chinese), multiple dialects may be present [23; 24]. The diversity of this group makes generalizations difficult.

HISPANICS/LATINOS

The term "Hispanic" refers to individuals who self-identify as having origins in Spain or Spanish-speaking countries, such as Mexico, Guatemala, Peru, Ecuador, or the Dominican Republic [25]. Persons of Latin American descent or origin are considered Latino/a/x.

In 2022, there were 63.7 million Hispanics in the United States, which represents 19.1% of the U.S. population [185]. The majority of the Hispanic population in the United States (63.3%) identify themselves as being of Mexican descent [26]. Approximately 27% of the U.S. Hispanic population identify as Puerto Rican, Cuban, Salvadoran, Dominican, Guatemalan, Colombian, Honduran, Ecuadorian, or Peruvian [26].

By 2060, Hispanics are expected to represent 31% of the U.S. population [132]. In 2019, the three states with the largest Hispanic population also had the most growth: Texas, California, and Florida [154]. They are also a young group, with a median age 30.7 years in 2022 [185].

NATIVE AMERICANS

The Native American population is extremely diverse. According to the U.S. Census, the terms "Native American," "American Indian," or "Alaskan Native" refer to individuals who identify themselves with tribal attachment to indigenous groups of North and South America [29]. In the United States in 2023, there are 574 federally recognized tribal governments and 324 federally recognized reservations [190].

In 2022, it was reported that there were 7.3 million Native Americans in the United States, which is approximately 2% of the U.S. population [190]. By 2060, this number is projected to increase to 10.1 million, or 2.5% of the total population [135].

In general, this group is young, with a median age of 31 years, compared with the general median age of 37.9 years [155]. According to the 2020 U.S. Census, the top five states with the greatest number of residents identifying as Native American are Oklahoma, Arizona, California, New Mexico, and Texas [191]. In 2022, this group had the highest poverty rate (25%) of any racial/ethnic group in the United States, more than double the national poverty rate of 11.5% [192].

CULTURE, RACE, ETHNICITY, AND CULTURAL COMPETENCE AND AWARENESS

Culture refers to the values and knowledge of groups in a society; it consists of approved behaviors, norms of conduct, and value systems [33; 34]. Culture involves attitudes and beliefs that are passed from generation to generation within a group; it is continually evolving and fluid [157]. These patterns include language, religious beliefs, institutions, artistic expressions, ways of thinking, and patterns of social and interpersonal relations [35]. Culture can also represent worldviews—encompassing assumptions and perceptions about the world and how it works [36]. Understanding culture helps to elucidate why groups of people act and respond to the environment as they do [37].

On the other hand, historically, race has been linked to biology. In this traditional definition, race was partially defined by physical markers, such as skin or hair color [38]. It does not refer to cultural institutions or patterns, but it is generally used as a mechanism for classification, and social meanings are ascribed to these classifications. Historically, the census in the United States defined race according to ancestry and blood quantum; today, it is based on self-classification. Further, in modern society, race is viewed as socially constructed without a true biological basis [193]. Racial characteristics are also assigned differential power and privilege, lending to different statuses among groups [40]. It is important to recognize that, for individuals, racial categorization is based on self-identification due to adherence to cultural norms, language, religion, and geography as well as physical appearance [193]. All this lends to the complexity and dynamic nature of the definition [193].

Ethnicity is also a complex phenomenon and has been defined in many different ways. Four components of ethnicity have been identified [41]:

- Social class
- Political process
- Traditions
- Symbolic token

When ethnicity is viewed as social class, the individual's ethnicity is compared to or equated with their socioeconomic class (e.g., working class or lower class). This is most clear in ethnic enclaves, the residents of which have strong cultural and familial ties [42].

Ethnicity may also be associated with persecution, both political and social. Ethnic unity may serve as a tool for social change and political reform [42]. Several famous ethnic movements took place in the 1960s, such as the unification of farm workers headed by César Chávez. Ethnicity has also been viewed as a return to traditions, characterized by a renewed interest in ethnic foods, traditional religious practices, native language, and folklore [42]. Finally, ethnicity is also acknowledged as being a symbolic token, a way for individuals to maintain a nostalgic connection to their homeland [42].

Cultural competence exists on both the individual level (practitioner's self-awareness) and the practitioner-patient relationship level. On an individual level, cultural competence training might focus on the expectations, preferences, and desires of culturally diverse patients or it might focus on practitioners' worldviews and experiences [43]. To focus only on the individual (or micro) level neglects the macro, community, and organizational levels. Cultural competent pain management requires an understanding of the complex interplay of social and cultural factors on individuals' perceptions, behaviors, and access to resources related to pain and pain management on micro, messo, and macro levels [157]. More extensive cultural competence training would help practitioners to see how social, economic, and political forces influence the patient-provider relationship and patients' access to resources [43; 123].

For healthcare providers, cultural awareness involves four components [44]:

- Ability to identify key cultural values of the patient
- Understanding of how cultural values influence a patient and his/her environment
- Skills to apply and implement services that are congruent with the patient's value systems
- Acknowledgement that awareness is a continual journey to learn about different cultural value systems and beliefs and apply them to Western intervention models

Practitioners working with patients experiencing pain should be aware of the patient's cultural value and belief systems and how they impact their pain experience and also how their own cultural background and professional culture/system affects how they view pain. Furthermore, culture can influence access to and utilization of pain management services and medications and provider communication [136; 157]. For the most part, practitioners are trained and socialized from a biomedical tradition [45]. Practitioners should reflect on their own experiences and the values and beliefs they attribute to pain [46]. Furthermore, it is important to exhibit cultural humility by forfeiting the role of expert and learning and understanding the lived experiences of patients living in pain [158].

Take a moment to consider the following self-reflective questions [46].

Pain Experiences in Childhood

- When you were a child, how did those who cared for you react when you were in pain?
- How did they expect you to behave when you had a minor injury?
- How did they encourage you to cope when you had severe pain?
- How did they encourage you to behave during an injection or procedure?
- When those who cared for you as a child were in pain, how did they react?
- What words did they use to describe the pain?
- How did they cope with their pain?
- Do you tend to follow their example?

Pain Experiences in Adulthood

- What painful experiences have you had as an adult (e.g., childbirth, fracture)?
- How did you express (or not express) your pain?
- Did the pain cause you fear? What were you afraid of?
- How did you cope with the pain?
- How did you want others to react while you were in pain?

Pain Experiences by Patients

- Have you ever felt uncomfortable with the way a patient was reacting (or not reacting) to pain?
- What did the patient do that concerned you?
- Why did you feel that way?
- Do you make value judgments about patients in pain who:
  - Behave more stoically or expressively than you would in a similar situation?
  - Ask for pain medication frequently or not often enough?
  - Choose treatments you do not believe are effective or with which you are unfamiliar?
  - Belong to a cultural group (e.g., ethnic, linguistic, religious, socioeconomic) different from your own?
- Do you tend to feel certain reactions to, descriptions of, or treatments for pain are "right" or "wrong?" What about these reactions makes them seem right or wrong?

CULTURAL DEFINITIONS AND EXPRESSION OF PAIN

The complexities of culture, race, and ethnicity and how they influence the meanings, definitions, and expression of pain are not completely understood. Studies have not delineated a clear model or pathway, but there is consensus that pain is more than just a biologic or physiologic response; there appears to be an interplay of biologic, social, psychologic, and environment factors. From a biopsychosocial perspective, how individuals react to a pain stimulus may be influenced by how they were socialized within their familial and cultural background [47]. Alternatively, gate control theory has been used to explain the link between culture and pain. According to this theory, pain is not merely a physiologic response to tissue damage; rather, reactions to pain are based on expectations and perceptions stored in one's memory [2; 122; 124; 126; 128; 129; 130]. Biologically, pain is moderated by a gating mechanism whereby cells block pain in the nervous system. Messages are sent to the brain to "open" or "close" these blocking mechanisms, and cultural memories can affect whether the pain impulses reach the brain [2].

PAIN EXPECTANCY AND ACCEPTANCE

There are two main aspects of pain experience: expectancy and acceptance [48]. Pain expectancy refers to an individual's expectation or anticipation of pain as inevitable and/or inescapable [48]. The inherent degree of pain expectancy will vary from individual to individual. Pain acceptance is an individual's attitude toward pain—the extent one is willing and able to handle and endure pain [48]. Cultural beliefs and norms can influence both pain expectancy and acceptance, as evidenced by studies illustrating differences in pain perception and tolerance in various racial/ethnical groups.

In general, research indicates that African Americans tend to experience pain more intensely and tolerate pain less than their White counterparts [137]. In one study, African American college students rated thermal pain stimuli more unpleasant compared with their White counterparts, but the underlying mechanisms to explain these racial differences are unclear [49]. Another experimental study found that African American women were more sensitive to pain compared to their White counterparts [159]. Some studies have shown that, compared with children from other racial groups, African American children require higher doses of morphine to alleviate pain [137]. These differences may be due to genetic differences in CYP450 2D6 pathway, which is responsible for metabolizing opioids [137].

An experimental study was conducted to examine the extent to which ethnic identity predicts pain sensitivity to three different types of pain—thermal, cold, and ischemic—among African American, Hispanic, and non-Hispanic White adults [50]. The researchers found that African American and Hispanic participants demonstrated lower tolerance to cold and heat pain compared to their White counterparts. The researchers suggest that chronic stress, socialization in exhibiting pain, and acculturation could all play a role in explaining such ethnic differences [50].

In a study that compared pain levels of Latino and White adults, a pain stimulus was administered (i.e., a blood pressure cuff was inflated and held for three minutes). In general, Latinos reported greater pain compared to their White counterparts [138]. A separate study examined the role of acculturation on pain perception in a sample of undergraduate Asian American and White students [51]. Research participants were engaged in a cold pressor task (immersing their non-dominant hand in a cold-water bath for as long as tolerable) to trigger acute pain. Pain response was higher for first-generation Asian Americans, who removed their hands earlier than other study participants, demonstrating lower pain tolerance.

This finding was replicated in a 2018 study that found higher levels of acculturation among Asian American participants correlated with greater heat pain tolerance [160]. Again, it was speculated that acculturative stress and chronic stress pertaining to immigration (including experiences with discrimination and racism) made this group more sensitive to pain [51]. This sensitivity could be triggered by physiologic exhaustion and reduced coping mechanisms resulting from such chronic stress [51].

Differences in pain acceptance or tolerance may also be explained by how likely individuals are to report pain. Some cultural groups may be less likely to disclose pain because they do not want pain medication or because they fear stigmatization [194]. Others adhere to a more holistic view of health, whereby pain is a symptom of an imbalance of physical, social, emotional, and spiritual factors. Differences can also be accounted for by implicit or explicit biases regarding some patient groups. For example, a study of medical students found that they attributed a perceived higher tolerance to pain among Black patients to less-sensitive nerve endings; some thought it was due to their thicker skin compared to White patients [195].

LANGUAGE USED TO EXPRESS PAIN

The terms used to describe pain are also influenced by culture. Women tend to use more expressive language when communicating pain, tending to use words such as "throbbing," "sharp," and "stabbing" [161]. Men tend to use less expressive language, perhaps due to cultural norms supporting stoicism for men. For example, in a study with Somali women, the participants used the same word to describe a host of painful circumstances ranging from cuts and fevers to childbirth, because the Somali term *xanuun* means both pain and illness [52]. In another study, terms such as "pain," "ache," and "hurt" were used by Hispanics, Native Americans, African Americans, and White Americans to refer to painful events or conditions [53]. However, the terms conveyed a different level of pain severity and intensity depending on the race/ethnicity of the subject. In a study conducted to explore racial differences in descriptors employed by African American and White American patients who had experienced myocardial infarction, African Americans were more likely to use "atypical" descriptions for their pain, such as "sharp" or "miseries" [54; 55]. One study found that older African Americans tended not to use the word "pain," as this term is reserved for severe discomfort, and instead used the terms "hurt" or "sore" [16]. More bothersome pain was described as "nagging" or "miserable." Similarly, the Hmong language does not have a word for "pain," so they use the word "hurt" because it is the closest in translation [196]. In another study, healthcare practitioners reported that Hmong patients employed minimal or no descriptors or adjectives for their pain, making it difficult for practitioners to evaluate pain intensity [197].

In a study of Cantonese Chinese individuals in Hong Kong, 597 different pain descriptor terms were distinguished [56]. In a study with participants from Cameroon, French-speaking females were more likely to use the word "crying" to connote an emotional state associated with the pain [162]. However, those who spoke Pidgin did not refer to pain physically (i.e., as a sickness) rather than an emotional state [162].

Some cultural groups have languages that are rooted in storytelling and symbols, and descriptions of pain in these groups may include vivid imagery. In a study with 10 Native Americans, the participants tended to use terminology rooted in nature to describe their pain [58]. Terms like "stretching," "throbbing," and "pulling" were common, and neuropathic pain was described as "hot lava," "freezing," "sparks," and "electric shocks." Some Native American participants employed the word "ache" even for extreme pain [163]. In a study of 101 Nepalese patients diagnosed with chronic musculoskeletal pain, 52% used metaphors (e.g., "like an infection," "like an ant bite," "like sleeping hands/feet") to describe the intensity or quality of their pain [139]. However, it is important for practitioners to avoid generalizing and applying an attribute for all groups or all members of a group. In some cases, age or generation might account for certain trends. For example, older Hmong patients were more likely to use storytelling compared with younger Hmong patients [196].

The underlying meanings of phrases are equally important. For example, descriptions of pain may be laced with underlying pride and achievement or fatalistic undertones. Some groups, including African Americans, Chinese, Koreans, and Mexican Americans, may view pain as an inevitable part of life, which can affect the way in which pain is experienced and described [59]. Other pain expressions may reflect idioms of distress, describing suffering in a cultural meaningful manner [164]. However, it is important not to stereotype and not to pathologize a group, as there is a tremendous amount of within-group diversity [60].

MEANINGS AND DEFINITIONS OF PAIN

Individuals construct and attach different meanings to pain (referred to as pain cognitions). These meanings are linked to personal and/or cultural beliefs and norms and at times, religious or spiritual beliefs [165]. A common theme in many cultures is that pain is a part of the human experience [2]. In these cases, coping with pain with stoicism and a high degree of self-control is highly valued because it is part of learning key lessons in life [2]. In some cultures, children are told stories of heroes who meet challenges head on and who do not complain about their suffering [140]. The goal is to socialize children (and adults, by extension) to cope with life's challenges and pain with resiliency and stoicism. For these patients, complaints will be avoided; it is more important to be perceived as a "good patient" [141]. In many Hispanic cultures, for example, life is believed to be full of trials that should be met and accepted with patience and without complaining [2]. Qualitative studies have found that Mexican Americans tend to believe that it is their duty (to God, their family, and community) to endure pain stoically [61; 62; 142]. The cultural value of *machismo* also has a functional role in health beliefs and behaviors. Part of *machismo* is the belief that men should be protectors and providers. Being in pain is viewed as contrary to these roles; therefore, being healthy is essential to fulfilling one's role as a man [166].

This value has been linked to the stoicism and duty promoted in Aztec and Mayan cultures. For these individuals, pain is not just a physical experience but encompasses social, familial, interpersonal, and spiritual factors as well. Some patients may feel that pain is bestowed by God and/or is part of familial or societal obligations. By extension, they may consider caring for others in pain to be an important or even sacred duty [62]. In these cases, perceptions of pain are clearly linked to religious and spiritual views.

Many Asian cultures also adhere to similar definitions and views about pain. For example, in Chinese culture, pain has three philosophical/religious foundations: Taoism, Buddhism, and Confucianism [5]. Taoism argues for harmony with the environment, whereby people live and adapt themselves to the order of nature [5; 167]. In terms of pain, Taoism argues that pain occurs if *qi*, the life energy, is blocked; resolution of pain requires the individual to restore harmony with the universe [5; 198]. In Chinese medicine, five elements play a role in health: water, fire, wood, metal, and earth. The goal is to keep all five elements in balance. Imbalances (e.g., dampness and cold) can affect the body and cause pain [168; 198]. Buddhism regards pain as a part of the human experience that must be experienced alone, with the knowledge that it is a temporary state. Finally, Confucianism focuses on adhering to a social order, in which loyalty to parents and family is paramount. According to this philosophy, pain is also a part of life and serves as a reminder of humanity [5; 167]. Knowledge of this background provides a frame of reference when working with Chinese patients and attempting to understand how they might construct meaning and what types of interventions may be most appropriate [5]. Many Chinese patients will avoid verbalizing their pain or suppress moans of pain, because stoicism is a highly valued cultural virtue [143]. They may not report pain until it becomes unbearable.

In a qualitative study, non-Hispanic White and Native American participants' terminologies to describe injury and the role of pain were explored [169]. Non-Hispanic White individuals were slightly more likely to use the word "pain" and believed that pain symptoms were an underlying manifestation of some illness or abnormality. Native American participants tended to ascribe pain to cultural and historical events. This is similar to a study of Hmong patients, in which some participants attributed the cause of their pain to their experiences during the Vietnam War, when they had to carry heavy baskets of food, their siblings, or banana stalk [196]. Native Americans were also more likely to view pain within the larger holistic context of the mind, body, emotions, and spirit [63]. As such, pain treatment should address each of these dimensions. In one study, individuals in rural Nepal reported the belief that pain is part of the aging process and is endured without the need to seek help [170].

In a study of Black Caribbean and White patients being treated for cancer, the Black Caribbean patients were more likely to attribute their cancer (and related pain) to a testing of their faith (i.e., loyalty to God) and to consider the diagnosis to be an opportunity to strengthen and confirm their religious beliefs [64]. Because the meanings of pain are interwoven with religion and spirituality, it is not surprising that pain is linked to past sins and immoral behaviors in many cultural groups. Similarly, some cultural groups attribute the cause of pain to mysticism or "the evil eye" [144]. Some patients may feel that their pain is a result of wrongdoing—a justifiable retribution [64; 193]. In some religions, prayer and other religious rituals may be done as a means to cope and atone for sins [65]. Similarly, some cultures believe pain symptoms are the result of an imbalance or a lack of harmony and may seek traditional healers to restore order (e.g., by performing a ritual or ceremony) [66; 194]. Overall, patients from Western societies tend to attribute pain to biological factors; other cultures are more likely to give a metaphysical explanation, including karma, evil, family wrongdoing, sin, and/or weakness. In these cultures, pain does not automatically mean that one should seek medical treatment. Instead, it may signify hardship and the need to build character and resilience [180].

EXPRESSING/COMMUNICATING PAIN

Communication consists of verbal and nonverbal components, both of which are embedded within the culture of the parties disseminating and receiving the information. In the context of pain, the term "pain response" is used to refer to the verbal (e.g., wailing, verbal complaints about pain symptoms) and nonverbal (e.g., facial expressions, body gestures) expressions of pain [67]. In order to understand how culture influences the communication of and coping with pain, it is first important to understand the role of high- and low-context cultures within the larger perspective of communication styles.

Styles of communication can be classified on a continuum from high to low context [68]. High-context cultures rely on shared experience, implicit messages, nonverbal cues, and the relationship between the two parties to disseminate information [69]. Members of these cultural groups tend to listen with their eyes and focus on how something was said or conveyed [68; 70]. On the other hand, low-context cultures rely on verbal communication, or what is explicitly stated in the conversation [69].

Consequently, low-context communicators listen with their ears and focus on what is being said [68; 70]. Western culture, including the United States, can be classified as a low-context culture. On the other hand, groups from collectivistic cultures, such as Asian/Pacific Islanders, Hispanics, Native Americans, and African Americans, are considered high context [68]. Clearly, adherence to cultural values influences communication styles. Cross-cultural communication is by no means simple, and there is no set of rules by which to abide. Instead, promoting culturally sensitive communication is an art that requires practitioners to self-reflect, be self-aware, and be willing to learn. Therefore, as practitioners become skilled in noticing nonverbal behaviors and how they relate to their own behaviors and emotions, they will be more able to understand their own level of discomfort and comprehend behavior from a cultural perspective [70].

In-depth interviews with Somalian women living in Sweden revealed that their pain is often communicated through body language as opposed to explicit verbal expression [52]. Most of the women indicated that they had experienced pain symptoms for a long time before communicating them to others. To be extremely expressive with one's pain (e.g., loud crying, wailing) was also viewed as unacceptable [52]. Similarly, in a qualitative study with Chinese women, the participants believed that pain should be dealt with stoically [71]. A separate study found that Asian Indian students were less likely to find overt expressions of pain acceptable compared with their American-born Indian counterparts [67]. Native Americans prefer to "block" all discussion and thoughts of pain [72]. A key theme that emerged in a focus group study about the expression of pain among patients and families in Ethiopia was perceived bravehood for stoic responses [39]. Focus group participants discussed how hiding one's pain is a sign of strength; tolerating pain was considered brave [39]. In many indigenous groups, endurance of pain is seen as a rite of passage to maturity and signifies courage [199].

Conversely, some cultural groups may be more likely to directly express pain. Studies have observed greater willingness to overtly express pain in American society, with a greater tendency to seek help from pain professionals and prescribed analgesics [67; 73].

COPING WITH PAIN

Coping is defined as the use of behavioral and cognitive strategies to relieve the internal or external environmental stressors that stretch an individual's strengths and resources [74]. These strategies have been categorized as active or passive. Active coping strategies are characterized by directive problem-solving techniques, actively seeking social support, and employing reappraisal methods to reassess the situation. In a quantitative survey with 90 Filipino migrant workers, the use of diversion and cognitive coping skills helped control pain better than reinterpreting and catastrophizing [200]. Meanwhile, passive coping strategies emphasize avoidance and utilizing techniques such as distancing, escaping, wishful thinking, and self-control [75]. In terms of coping or managing pain, individuals employing active coping strategies would attempt to stay busy, focus less on the pain, place their energies on another activity, and continue with normal activities of daily living [76]. Meanwhile, those in pain employing passive coping strategies may escape the pain by using wishful thinking, venting, or catastrophic thought patterns [76]. Some studies have found that active coping methods and positive reappraisals assist in improving well-being among individuals experiencing pain; those who use passive coping strategies such as wishful thinking and blaming oneself have poorer levels of well-being [77]. Catastrophizing is a coping method whereby one focuses on the pain stimulus, overstates the threat of the pain, and ultimately holds the belief that one cannot handle the pain [78]. Not surprisingly, this coping strategy is related to experiencing higher levels of pain, increased use of medication, and increased use of healthcare services across different age groups and different types of pain [78; 79].

Certain cultures/ethnicities display a greater tendency for catastrophizing, which may be at least partially explained by a culture categorization of collectivistic or individualistic. Individualistic cultures place an emphasis on individuality and an internal locus of control, with challenges often attributed to modifiable environmental factors [80]. In general, White European and American cultures tend to be individualistic. Those from individualistic cultures are believed to be more likely to use active coping strategies in order to "manipulate" their environment to deal with pain and more likely to withdraw into themselves [52]. Collectivistic cultures emphasize the collective unit, interpersonal relationships, and the support system, and those from collectivistic cultures often display an external locus of control [81]. Many racial/minority groups are categorized as collectivistic cultures. In general, individuals from collectivistic cultures tend to rely more on passive coping strategies in order to reduce internal feelings of helplessness and stress [80]. A systematic review of Hispanic Americans found that this group tended to employ catastrophizing more than their non-Hispanic White counterparts [142]. African Americans also exhibit higher levels of catastrophizing and related increased pain sensitivity [82; 145]. Practitioners should be careful not to automatically label patients who catastrophize as "faking it" [201]. Nor should it be viewed as maladaptive behavior requiring intervention. Instead, for some patients, catastrophizing may be a coping strategy to ensure they receive medical or psychological assistance [201].

African Americans have also historically relied on religion and spirituality to cope with racism and discrimination, and this appears to also extend to other challenges, including pain [145]. In a study of 939 veterans with chronic arthritis pain, African Americans were more likely to view a prayer as a helpful method and to use prayer and hope to cope with pain compared with their White counterparts [74]. In a systematic review, African Americans employed coping strategies that included prayer, catastrophizing, hoping, distraction, and problem solving more frequently to deal with pain compared with White patients. White patients attempted to ignore the pain more often than African Americans [171].

Hispanic Americans also depend on religion for pain-coping. Among this population, talking to a priest or a pastor is viewed as part of pain management, and asking God to help alleviate pain is a coping mechanism for many Hispanics [142]. It is important to support patients' spiritual coping while also providing education on other pain management options (e.g., medication) [16].

The theme of self-control (a passive coping method) is also prevalent among many racial and ethnic minority groups. In a small study with 35 African American patients recruited from oncology clinics, participants stated that continually talking about pain would amplify it and make them feel even more helpless and out of control. Family and the community were identified as important, but constantly talking about pain with family members was believed to push them away [83].

The question of whether religious coping (e.g., praying, seeking comfort in faith) is an example of active or passive coping has been raised. A study of 200 Latino patients with arthritis pain found that there was a positive relationship between active coping and religious coping [76]. For these patients, use of religious coping was also associated with greater psychologic well-being and adjustment [76]. However, some argue that prayer, hope, and meditation are examples of passive coping and lead to poor adjustment to pain [146].

In a study of Native Americans' cancer pain experience, participants navigated a fine line between privacy and reliance on communal support [58]. By using traditional native ceremonies, rituals, and prayers, they bring together their tribal relations for healing, coping, and support. Yet participants expressed concern about safeguarding their privacy, as tribal communities are often closed systems.

Use of pain coping strategies is not static [157]. For immigrants, strategies can alter over time as they become familiar with cultural norms of the host country, Western biomedical interventions, and different self-management strategies. The key is for practitioners to avoid stereotyping and pathologizing patients' belief systems.

HELP SEEKING

Help seeking consists of the ways (formal and informal) in which individuals request assistance due to distress [84]. Understanding individuals' patterns of help seeking allows for a greater appreciation of their attitudes toward pain and pain management. Asking for either formal or informal assistance implies different meanings in different cultures.

Saint Arnault proposed the Cultural Determinants of Help Seeking Model, which posits that there are three major dimensions that influence how assistance is sought: perceptions and labeling, interpretations of meaning, and social context dynamics [85].

Perceptions and Labeling

The sensations experienced by an individual are first perceived and labeled as a "symptom" or a form of atypical or abnormal state, which is perceived as distressing. This is then sifted through a specific cultural lens. As discussed, members of various cultural groups will have different levels of pain sensitivity and tolerance, and some groups will define a stimulus as "painful" while others will not [85].

Interpretations of Meaning

When an event is perceived as distressing, the individual will then attribute meaning to the symptom. Two types of attributions can be made: attributions of social significance or causal attributions. A social significance attribution involves an individual attaching a positive or negative social significance to the event. For example, a patient might believe that pain is reflective of a personal failure or character flaw [85].

Causal attribution involves attempting to determine the source(s) of a symptom or event (e.g., physical, psychologic/emotional, or environmental factors) [86]. The method of help seeking is often partially influenced by causal attribution. For example, if pain is perceived to be emotionally rooted, then the individual might seek mental health or counseling services. In a study of 1,570 adults in Hong Kong, 25% attributed chronic pain to excessive physical work and self-treated with rest [147]. In Chinese cultures, pain may be attributed to an imbalance of yin and yang, with help then sought through acupuncture or herbal medications [5]. In cultures that believe pain is the result of spiritual unrest or imbalance (e.g., Hmong, Native American), patients may seek help from a traditional healer, shaman, or spiritual advisor [59; 72]. Some racial/ethnic minority patients (e.g., Navajo Indians) may be reluctant to seek help in places where people have died, including hospitals [66].

Social Context Dynamics

Finally, an individual's social, economic, and familial environment will affect help seeking. The availability of resources (e.g., social network system, community, neighborhood, workplace, institutional organizations) will influence the type and extent of help available. In addition, social rules of exchange (e.g., who can partake in the resources, under what circumstances, and when they should be reciprocated) may also affect help seeking. Collectivistic cultures are more likely to provide assistance to members in their group, and it is expected that the individual will rely first on his or her family before seeking outside help [85]. Meanwhile, individualistic cultures expect that individuals will first attempt to address and resolve the problem alone. After having taxed internal and external resources, they will then seek outside help [85].

FACTORS THAT CONTRIBUTE TO RACIAL AND ETHNIC DISPARITIES IN PAIN MANAGEMENT

It is clear that health disparities exist among racial and ethnic minority groups, and this is true for pain management services and medications. A large-scale national study in the United States found racial differences in the prescription of analgesics for patients with migraine, low back pain, and bone fractures [87]. Specifically, African Americans were less likely to be prescribed analgesics for their pain compared with their White counterparts. Racial minority patients are also more likely to experience longer wait times for medication compared with White patients [16].

In a 2023 study, Black patients with severe pain were less likely to receive analgesics compared with their White counterparts [202]. In a 2019 large-scale survey, African American patients were 6% and 7% less likely to receive opioids for abdominal pain and back pain, respectively, compared with White patients [172]. Hispanics were 6% and 14.8% less likely to be given opioids for abdominal and back pain, respectively, compared with White patients [172]. Analysis of a national dataset found that African Americans were less likely to be prescribed opioids for back pain and abdominal pain compared with non-Hispanic White Americans [148]. The authors speculate that racial biases may influence prescribing behaviors. An examination of Medicaid patients who received epidural analgesia during vaginal childbirth also found statistically significant racial/ethnic differences [88]. In this study, 59.6% of the White patients received epidural analgesia, compared with 49.5% of African Americans, 48.2% of Asians, and 35.2% of Hispanics. Even after the researchers controlled for age, urban/rural residence, and the availability of anesthesiologists, race and ethnicity still predicted epidural analgesia prescribing trends [88]. In a systematic study about postoperative pain management, researchers found that African Americans reported more severe postoperative pain than their White counterparts, but White patients were more likely to be prescribed opioids for pain management [203].

In a meta-analysis of ethnicity and pain management, researchers found that professionals underrated ethnic minority patients' levels of pain and were less likely to indicate their pain scores on their charts compared with their White counterparts [89]. In addition, African American and Hispanic patients were less likely to have been given analgesics than White patients. The result is that many patients feel their pain symptoms are minimized or that they are suspected of drug seeking [204].

Many factors contribute to these racial disparities. One factor may revolve around practitioners' underlying biases, stereotypes, and mistaken assumptions, also referred to as implicit bias. For example, some practitioners may falsely attribute some level of innate "toughness" to African American patients based on the groups' history of overcoming oppression and trauma [173]. Others may have an explicit or implicit belief that minority patients are more likely to misuse prescribed opioids [174].

Studies have not definitively isolated the factors that contribute to these disparities. One of the challenges in understanding health disparities, and particularly pain management disparities, is the fact that racial and ethnic minority groups are heterogeneous [90; 125]. Recent immigrants from Japan, for example, are going to be very different from native-born Japanese who have resided in the United States for generations [90]. However, researchers have often combined these groups, as challenges in recruitment yield small sample sizes that make it difficult for statistical analyses to be meaningful. The literature has identified a variety of reasons for these disparities stemming from several factors [91].

BARRIERS RELATED TO WESTERN BIOMEDICAL CULTURE

Western biomedical culture emphasizes a clear dichotomy between the mind and the body as well as what is observable (objective) and what is not (subjective) [92]. Pain is not easily measured, making its assessment and treatment a challenge in Western medicine [92]. In addition, many healthcare professionals may not be adequately trained to incorporate spirituality in the management and treatment of pain for patients who desire to incorporate a more holistic approach [93]. The Western American medical paradigm also leans toward cure rather than care [92]. Patients who present with symptoms that lead to a diagnosis for which there is a clear pathway of interventions and treatment are "favored." Furthermore, in terms of pharmacologic pain management, the Western biomedical model has stigmatized addiction, resulting in stigmatization of patients who seek pain management medications [205]. Because of the subjective nature of pain, healthcare professionals must often make clinical decisions in the face of a lack of absolute, clear physical evidence [94]. This is complicated by the fact that, in the biomedical model, the relationship between the practitioner and the patient positions the practitioner as the expert, with authority and power, and the patient as subordinate [205].

SOCIETAL AND INSTITUTIONAL BARRIERS

Societal and institutional barriers include racism, discrimination, poverty, lack of health insurance, and deleterious environmental factors in communities [7]. For example, groups that have historically (or currently) been victims of institutional racism and discrimination are more likely to delay seeking help for pain [89]. For example, some studies indicate that African American men may experience higher levels of pain intensity in part due to their experiences with different forms of racial discrimination [16]. Even today, racial and ethnic minority patients are more likely to be placed in a negative valenced relationship [94]. In the context of pain management, healthcare providers are more likely to discount the pain due to the negative valenced relationship triggered by racism and discrimination [94].

It has been shown that physicians tend to have less involved communication and less participatory interactions with racial minority patients and low-income patients [92]. In one study, when Hispanic patients visited physicians for back pain, their encounters were 1.6 minutes shorter compared with non-Hispanic White patient visits [172]. In addition, the stereotype that certain racial minority groups come from chaotic and disorganized families and environments increases the likelihood of healthcare professionals labeling them as "difficult." Just as healthcare professionals may have preconceived notions about patients, patients may have pre-existing assumptions about the provider. For example, one study of Native American patients found that the participants tended to feel that healthcare professionals were not interested in hearing about their pain experience and did not have confidence that they would be helped [72]. Thus, a cycle of myths and stereotypes continues.

One oft-cited study found that three-quarters of pharmacies located in areas of New York City with a high proportion of racial and ethnic minority residents did not stock adequate supplies of opioid analgesics [95]. One study found that only 25% of pharmacies in a predominately racial/ethnic-minority neighborhood were well supplied with opioids, compared with 72% in predominantly White neighborhoods [163]. Some pharmacists attributed the low supply to lower demand, but others cited factors related to racism and discrimination. In addition, pharmacies in areas with high concentrations of racial minorities are more concerned with burglaries, additional regulations, and penalties imposed by state and federal drug-enforcement agencies than pharmacies in predominantly White neighborhoods [95].

HEALTHCARE PROFESSIONAL-RELATED BARRIERS

Healthcare professional barriers may include professionals' beliefs about appropriate pain management; lack of training and knowledge about the intersection of pain and culture, race, and ethnicity; lack of culturally sensitive assessment for pain; and expectations about racial and ethnic minority pain patients based on stereotypes [96]. For example, the belief that African Americans' skin is thicker than White skin and therefore experiences less pain is a common myth [175]. Consequently, practitioners may underestimate and minimize racial minority patients' pain experiences.

There is also a phenomenon of fundamental pain bias, meaning one's own pain reports are viewed as more accurate and objectively communicated; conversely, individuals tend to believe that others exaggerate their pain. When there is racial/ethnic discordance between the practitioner and patient, the practitioner is more likely to consider reports of pain as exaggerated [206]. In a qualitative study, Native American individuals described their complaints of pain being dismissed, receiving inadequate care, and neglected aftercare [149].

Practitioners may also have implicit or explicit biases about individuals from lower socioeconomic backgrounds. These patients are often viewed as being less competent, unable to control medication use, and less compliant with medical regimens [207]. Studies have also shown that the language and race/ethnicity of the healthcare professional influences pain management. For example, the ratings of pain tend to be comparable when the patient and healthcare provider speak the same language. When there is a native language, pain ratings tend to diverge. When literacy and language barriers are eliminated, assessment and treatment improves and racial and ethnic minority patients with pain fare better [146]. In addition, healthcare professionals' level of empathy appears to increase when the patient and healthcare professional share the same skin color or are of the same ethnic group [97; 131].

PATIENT-RELATED BARRIERS

Patient barriers to effective pain management include fear and anxiety about substance misuse and addiction, cultural values such as fatalism (i.e., pain is inevitable), and ideas about being a good patient [91]. Cultural values about pain coping, definitions, expression, and experience may also be patient-related barriers. For example, those with a fatalistic perspective of pain are often stoic. A qualitative study of Somali women found that the participants felt wailing or crying about one's pain was a sign of weakness [52]. Similarly, Hispanics and African Americans are more likely to embrace the importance of being stoic and are less likely to ask for pain medication [89]. Sometimes, stoicism is tied to historical experiences with oppression and trauma. In a 2015 study, Aboriginal people in two rural communities indicated that mistrust of Western medicine kept them from expressing their pain [176]. Studies also show that Hispanic and African American patients with cancer tend to under-report their pain for fear of being labeled as complainers or of distracting their physicians treating their illness [98]. Some patients will not ask questions for fear that would be viewed challenging an authority figure [143]. Some ethnic/racial minority patients disclose that they avoid pain medications because they overestimate the risk dependence [99; 141; 143].

CULTURALLY SENSITIVE ASSESSMENT OF PAIN

It is important to remember that assessment is an ongoing process. Practitioners may use closed-ended and open-ended assessment questions to evaluate the patient's level of pain. A combination of closed- and open-ended assessment questions is recommended, as they both have their merits and limitations.

EVIDENCE-BASED PRACTICE RECOMMENDATION

According to the Institute for Clinical Systems Improvement, the use of pain scales has been part of pain treatment for many years and has become standard practice. Pain scales should be posted for the patient to understand what the scale means. Clinicians can reassure patients by explaining that two people may have a different score for the same type of pain.

(https://www.icsi.org/guideline/pain. Last accessed September 27, 2024.)

Level of Evidence: Expert Opinion/Consensus Statement

CLOSED-ENDED QUESTION PAIN RATING SCALES

Pain rating scales can be categorized as either unidimensional or multidimensional. As the term indicates, unidimensional scales assign a number to a single dimension of a concept. For example, a unidimensional scale might measure pain intensity. Typically, these scales are easy to administer and cost and time effective [100]. Examples of unidimensional pain scales include a numerical pain rating scale, a visual analog scale, and a verbal descriptor scale. All these pain-rating scales are self-reports from the patient, which is the most reliable regardless of age, communication, or any other factor [150].

Unidimensional Pain Scales

Unidimensional pain scales measure the patient's self-reported pain intensity [150]. The numerical pain rating scale is a self-report scale whereby the practitioner asks the patient to rate their pain on a scale of 1 to 10 or 1 to 100 (from least to most severe) [100]. Some patients, particularly those with lower English proficiency, may have difficulty using numerical ratings to convey changes in pain quality and intensity over time [158]. Choosing a favorite number or a sacred or meaningful number is common in some groups [163].

With the visual analog scale, the patient is asked to mark her or his current level of pain on a horizontal line, where one end of the continuum is anchored with "no pain" and the other end is anchored with "extreme pain" [100]. It has been argued that this scale is more sensitive than the numerical pain rating scale [100]. Finally, a verbal descriptor scale asks the patient to consider his or her level of pain, and it consists of several numerically ranked adjectives or verbal descriptors. For example, 0 means "no pain," 1 is "mild," 2 is "moderate," 3 is "severe," and 4 is "unbearable" [101]. The problem with the verbal descriptor scale is that because pain is subjective, the descriptors may only be an artificial assessment of the patient's perceived pain. For example, the term "severe" and "unbearable" may have different connotations for each individual [101]. A review of articles written on these three scales concluded that they all have good validity and reliability and are practical for clinical purposes [102]. Generally, patients appear to have more challenges in understanding the visual analogue scale than the verbal descriptor or numeric rating scales. The numerical rating scale has good sensitivity and appears to be the easiest to use and comprehend [102]. The most popular unidimension pain scales are the numeric rating scale, the visual analog scale, and the verbal rating/descriptor scale [150].

Multidimensional Pain Scales

Multidimensional scales for pain assess for more than one attribute or dimension of pain [101]. Examples of multidimensional scales for pain include (but are not limited to) the McGill Pain Questionnaire, the Brief Pain Inventory, the Dartmouth Pain Questionnaire, and the West Haven-Yale Multidimensional Pain Inventory. The McGill Pain Questionnaire is one of the most popular multidimensional measures of the sensory, affective, and evaluative dimensions of pain, assessing both pain intensity and quality [100; 103]. There are a set of descriptors for each of the three dimensions, and the original long form takes 10 to 15 minutes to administer and assesses nearly 100 dimensions of pain. However, a shortened version of the form consisting of 15 sensory and affective descriptors and a verbal rating of the pain's level and duration takes only 2 to 5 minutes to administer [100; 104]. Although it is not a substitute for the long-form version, the shorter instrument is reliable when limited time is available [104].

The Brief Pain Inventory measures a patient's pain intensity in terms of sensory pain experienced and interference with life. It also assesses pain relief, pain quality, and patient views about the causes of the pain [105]. The Brief Pain Inventory is comprised of 32 items, with the patient selecting his or her responses on a scale of 0 to 10. The original long-form version takes about 15 minutes to administer [105]. The short form is similar and inquires about pain intensity and pain interference using a rating scale and the percentage of pain relief by analgesics [105].

Closed-Ended Pain Assessment Scales and Culture

It is important to consider if instruments that have originally been developed for and targeted to White patients will be culturally appropriate for use with racial and ethnic minorities. As discussed throughout this course, pain is highly subjective and is influenced by language and culture. Taking this into consideration, many of the closed-ended item question pain rating scales have been adapted for cultural and racial/ethnic minority groups.

The numerical rating scale was translated (and back-translated) into Swahili for use in Kenya and pilot tested with 15 individuals 8 to 69 years of age. In general, the participants understood what the progression of the numbers conveyed and thought the scale was easy to understand, with good face validity [106]. However, some studies have shown that linear numerical scales are conceptualized differently based on a group's cultural norms. For example, one study found that Native American patients selected a number on the rating scale not to reflect their pain but because it had symbolic and sacred connotations to them [93; 107]. Language is another consideration. The number four is nearly homophonous with the Mandarin word for "death," and therefore, some Chinese patients will be less likely to select this number on the pain rating scale.

The visual analogue scale is typically presented on a horizontal scale, which can present problems in come cultural groups. For example, because some traditional Asian languages are read down vertically, unlike European languages, which are read horizontally left to right, respondents in one study could not comprehend the visual analogue [108]. As such, modification of the scale may be necessary for these populations.

The revised Iowa Pain Thermometer (IPT-r) and the revised Faces Pain Scale have also been demonstrated to be valid and reliable for older African Americans [16]. Both instruments are pictorial (i.e., a thermometer and a set of faces).

Older African American adults tend to prefer the verbal descriptor rating scale, which is generally valid and reliable for this population [16]. Furthermore, it has also been adapted for use with racial and ethnic minority groups. Translation of the verbal descriptors into Chinese and translation back into English resulted in the following terms, from most to least painful [108]:

- Crucifying pain
- Crushing the heart and lungs
- Excruciating pain
- Unbearable
- Indescribable
- Very painful
- Painful
- Bearable
- Quite painful
- Slight pain
- No pain

The McGill Pain Questionnaire has been translated into 26 different languages including Chinese, Korean, Spanish, Italian, German, Turkish, Japanese, Dutch, German, Greek, and Norwegian, and it has been validated among various cultural groups [109; 110; 111].

One study found that the term "pain" was used to describe severe intensity versus terms like "ache" and "hurt" for less intense pain [53]. This trend was observed among Hispanics, Native Americans, African Americans, and non-Hispanic White Americans. In another study using medical records of 268 Hispanic and non-Hispanic White patients, the McGill Pain Questionnaire was equally reliable for both groups [112]. However, there were statistically significant differences in the five descriptor items (i.e., throbbing, gnawing, aching, tiring-exhausting, and sickening).

The Brief Pain Inventory has also been adapted for use with other groups. Not only has it been translated into and validated for several languages (e.g., Chinese, Japanese, Korean, Malay, Thai, Taiwanese, Norwegian, Spanish, Russian, Italian, Greek, Portuguese, Hindi, Polish), it has been found to be valid and reliable for many groups [113]. For example, in a study of 534 Taiwanese patients with cancer, the researchers found the Taiwanese version was reliable for both pain intensity and interference scales [114]. A study with 143 Brazilian patients from outpatient cancer clinics showed good validity and reliability with the Portuguese version [115]. Analyses also demonstrated good correlation with the McGill Pain Questionnaire [115].

OPEN-ENDED ASSESSMENT QUESTIONS

Because pain is highly subjective, some argue that a numerical score calculated from pain instruments does not capture the underlying meanings and experiences of pain. Consequently, asking open-ended questions and paying close attention to both verbal and nonverbal cues are essential to understanding a patient's pain [71]. Experts recommend asking the following questions [116]:

- What do you call your pain? What term do you use to describe your pain?
- Why do you think you have this pain?
- How bad is the pain? Does it last a long time? A short time? Can you be specific?
- What are you most afraid about what you are experiencing?
- How has the pain affected you?
- What types of treatment and remedies have you received?
- What types of treatment and remedies do you think would be most helpful? What would be the most important outcomes from the treatment?
- Who do you talk with about your pain? What do they know?
- Who helps you cope with the pain you are experiencing?

In a qualitative study, practitioners encouraged their Hmong patients to use scenarios and images to describe their pain, as these patients had difficulty with numerical pain scores. The stories, metaphors, and imageries would often contain the elements found in quantitative pain instruments [196]. Focusing on physical cues, such as energy level, appetite, weight, and sleep, can be less stigmatizing [197]. The importance of rephrasing questions and breaking down questions into simpler terms were also identified [197]. Because many racial and ethnic minority patients value the role of stoicism, use of the term "pain" may not be conducive to engaging patients in conversations about their condition. The practitioner should first ask the patient which term she or he prefers to use to describe the pain [89]. Prompting with alternate terms (e.g., "nagging," "sore") may be helpful [16]. Asking about how a patient's pain affects their work in and/or outside the home on a daily basis can be helpful in understanding the patient's functioning, pain quality, pain intensity, and pain evolution [208]. Developing good rapport and trust can help overcome stoicism and allow practitioners to identify nonverbal pain indicators (e.g., tenseness, grimacing, flinching) [143; 197].

As trust between patients and providers develops, both will gradually let go of their own biases and cultural stereotypes [151]. Asking patients for their opinions and views and spending more time listening than talking will build trust. It is important to allow the patient to tell their pain story without interruption [177].

It is important to remember that patients are the experts on the pain they are experiencing. When patients tell their own narratives/stories, clinicians will have a better understanding of their meanings of pain, coping mechanisms, and impact of family and social support [151]. Patients should also be reassured that reporting pain is not complaining [16].

PAIN MANAGEMENT AND INTERVENTIONS

PATIENT EDUCATION AND EMPOWERMENT

Education and empowerment work hand in hand. The Western biomedical culture often reduces pain to the physiologic symptoms and sensations, but pain is not merely about physiology, and focusing only on "curing" pain can result in patients forfeiting their sense of control and responsibility and becoming passive agents [117; 118]. If patients are educated and empowered, they can become more resourceful in managing their pain and become active agents in their treatment [118; 209]. In the context of pain treatment, the main components of empowerment are [118; 127]:

- Multidisciplinary pain management, with patients offered an option of resources that best suit their needs and value systems
- Education
- Inclusion of patients in the decision-making process
- Optimistic communication and hope that positive outcomes could result
- Connection with others who are going through similar experiences
- Compassion (e.g., active listening)

Practitioners' conveyance of compassion is important because patients being treated for pain often fear that no one believes their pain is real.

When working with racial and ethnic minorities, it is crucial for practitioners to remember that the concept of individualism is more embraced by Western cultures that place more emphasis on the concept of autonomy. When it comes to pain management, empowering patients assumes that they have a level of responsibility to manage their pain. However, many cultures place more value on collectivism. In these cases, practitioners should explore the role of the family, community, and other support networks that may be involved in the patient's pain management [45].

The concept of continuing social roles and not taking time to rest despite pain may be more common among racial and ethnic minority groups [178]. Practitioners can include education on the importance of balancing rest and self-care along with the challenges of continuing with life roles [178].

Practitioners should also consider health literacy and English proficiency when working with immigrants and racial minorities [141]. Reader-friendly materials in a variety of languages are needed to disseminate pain information. Finally, it is important to keep in mind that racial/ethnic minority patients often have less access to research and news regarding new therapies, medications, and treatments to pain. Therefore, it is important to provide education and information [210].

ROLE OF COUNSELING

Because pain is a multifaceted phenomenon, it is important for patients to consider pursuing an integrated system of care for their pain. This involves looking into the emotional and psychologic component of pain [117]. Mental health and social service providers can assist patients in identifying and discussing the meanings of their pain experience. Many racial and ethnic minority patients do not adhere to a dichotomy between the mind and body and may be more open to talking about pain's link to their emotions and life circumstances. A study conducted with patients at a pain center compared the attitudes of Puerto Rican patients with non-Hispanic White patients [45]. White patients disclosed feeling that their pain was being discounted or negated if their physicians asked psychosocial-related questions about the pain. In general, these patients wanted pharmacologic interventions and were upset by suggestions that their pain was potentially psychologically and/or emotionally rooted [45]. However, the Puerto Rican patients did not express any complaints when their physicians inquired about family, community, relationships, and other psychosocial factors that might be linked to their pain symptoms [45].

Cognitive-behavioral therapies have been widely employed for patients being treated for chronic pain. Alone, this type of therapy does not relieve pain symptoms [28]. Instead, techniques such as reframing, guided imagery, distraction, and identifying cognitive distortions such as catastrophizing and black-and-white thinking (i.e., all or nothing) can help patients understand how cognitions can influence pain and related behaviors [119; 209]. For patients who tend to catastrophize, practitioners can provide education on the deleterious impact negative thoughts and emotions can have on experiences of pain. Relaxation techniques can also be included in patient education [201]. The resultant improvements in coping can enhance quality of life [28]. There are five main goals when working from this paradigm [117; 209]:

- Reframing with patients that their pain is manageable (i.e., patients can be taught to have the positive attitude that they have control over their pain)
- Assisting patients to monitor and track their pain symptoms and link their symptoms to external and internal psychosocial challenges
- Teaching new ways for patients to think about their problems (i.e., identifying maladaptive cognitive distortions) and new ways of coping
- Challenging maladaptive thoughts and teaching use of calming statements
- Educating patients about different ways to use relaxation techniques as coping techniques

Because religion and spirituality are central to the lives of many racial and ethnic minority patients, it is important to understand how they use religion and spirituality to understand and cope with their pain symptoms [120]. Practitioners may employ cognitive-behavioral techniques to help patients identify religious cognitive distortion. An example of a pain-related cognition is: "Pain is a symptom of guilt." A religious cognition might be: "God is good and fair. My pain is a symptom of my guilt from sin." This then yields a cognitive distortion: "My pain is a consequence of my sins, and I deserve it" [119]. Practitioners can teach patients to identify these types of cognitive distortions, challenge their validity, and identify problem-solving strategies, reframing, and positive reappraisals [119; 209]. These patients should be encouraged to employ positive religious coping strategies such as prayer, meditation, and confession.

ALTERNATIVE REMEDIES

Practitioners should explore both traditional biomedical pain management interventions and non-traditional alternative remedies (as appropriate) when working with racial and ethnic minority patients. Complementary self-management approaches for pain can be generally classified as mind/body approaches or natural products [152]. Self-management is a common and primary method of managing pain among Asian immigrants. Use of exercise, traditional Chinese medicine, nutrition, and general physical activity are typical and perceived as culturally appropriate [178].

Mind/body approaches include meditation, yoga, acupuncture, and breathing techniques. Natural products include herbs, vitamins, and topical ointments [152]. Some patients may be more receptive to traditional healing methods (e.g., herbal remedies, traditional healers) [72].

In focus groups, Native American participants reported using a range of alternative therapies for pain, including acupuncture, massage, chiropractic treatment, and guided imagery [149].

Alternative remedies for pain can be classified into five different areas, and many can be used as adjuncts to conventional therapies [121; 153]:

- Alternative medications: Nonpharmacologic substances, such as those associated with homeopathic medicine, traditional Chinese medicine, and Ayurveda medicine
- Mind-body interventions: Interventions that focus on using the mind to influence bodily symptoms, including biofeedback, meditation, music therapy, and guided imagery. Mind-body interventions help reduce pain and improve other comorbid conditions, such as depression.
- Biologically based interventions: Consumption of biologic products (e.g., herbs, vitamins, foods)
- Manipulation strategies: Adjustment of focused areas of the body (e.g., chiropractic measures, massage, acupuncture)
- Energy therapies: Balancing energy fields (e.g., electromagnetic therapy, reiki, qigong)

Some cultural groups subscribe to the hot/cold theory of disease, which argues that illnesses are the result of bodily imbalances and that foods and alternative medications are inherently "hot" or "cold." Pain is considered a "cold" disease, and some patients who adhere to traditional healing will take this into account when selecting and adhering to treatment approaches [142].

INTERPROFESSIONAL COLLABORATION AND PRACTICE

Pain is a multidimensional problem. To facilitate greater quality and more efficient care, care plans should be synchronized and carefully coordinated among the entire healthcare team. Pain is still poorly understood, and pain education has been fragmented in the different health care professions [179]. Caring for patients in pain requires a collaborative interprofessional team approach, with every provider contributing their unique skills, competence and roles. In addition to physicians, nurses, physiotherapists, dentists, pharmacists, occupational therapists, and mental/behavioral health professionals, alternative and complementary practitioners, spiritual healers, and cultural experts all play a key role when working with diverse patients experiencing pain.

The IASP has recognized the importance of interprofessional practice and learning in providing care to patients in pain. They developed an interprofessional pain curriculum that recommends topics and content for students in health professions in their pre-licensure programs [179]. There are four main components of the curriculum: multidimensional nature of pain; pain assessment and measurement; pain management; and pain-specific clinical conditions [179].

CONCLUSION

With the expanding multicultural diversity of the United States, it is imperative that culturally competent care for pain assessment and management become the backbone in practice. In order to establish trust with patients, practitioners should be attuned to the fact that pain is a multifaceted biopsychosocial issue and the meanings of pain and suffering are embedded in a sociocultural context. As such, it is necessary to take into account the role of culture in patients' experiences and expressions of pain. Culture will also influence the treatment sought, what treatment is considered acceptable, and help-seeking behaviors. This underscores the importance of being able to deliver culturally competent pain care.

Works Cited

1. Frohm KD, Beehler GP. Psychologists as change agents in chronic pain management practice: cultural competence in the health care system. *Psychol Serv*. 2010;7(3):115-125.
2. Calvillo ER, Flaskerud J. Review of literature on culture and pain of adults with focus on Mexican Americans. *J Transcult Nurs*. 1991;2(2):16-23.
3. Juarez G, Ferrell B, Borneman T. Influence of culture on cancer pain management in Hispanic patients. *Cancer Pract*. 1998;6(5):262-269.
4. Facco E, Teston I, Di Lucia D, Roncon L. Relevance of a biocultural approach in the assessment of chronic pain: a comparison between Peruvian women living in Nasca and Lima. *World, Culture, Psychiatry, Research Review (WCPRR)*. 2013;8(1):60-70.
5. Chen L, Miaskowski C, Dodd M, Pantilat S. Concepts within the Chinese culture that influence the cancer pain experience. *Cancer Nurs*. 2008;31(2):103-108.
6. International Association for the Study of Pain. IASP Announces Revised Definition of Pain. Available at https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=10475. Last accessed September 11, 2024.
7. Mossey JM. Defining racial and ethnic disparities in pain management. *Clin Orthop Relat Res*. 2011;469(7):1859-1870.
8. Goldberg DS, McGee SJ. Pain as a global public health priority. *BMC Public Health*. 2011;11(1):770-774.
9. Hardt J, Jacobsen C, Goldberg J, Nickel R, Buchwald D. Prevalence of chronic pain in a representative sample in the United States. *Pain Med*. 2008;9(7):803-812.
10. Breivik H, Collett B, Ventafridda V, Cohen R, Gallacher D. Survey of chronic pain in Europe: prevalence, impact on daily life, and treatment. *Eur J Pain*. 2006;10(4):287-333.
11. Stewart WF, Ricci JA, Chee E, Morganstein D, Lipton R. Lost productive time and cost due to common pain conditions in the U.S. workforce. *JAMA*. 2003;290(18):2443-2454.
12. Hamelsky SW, Lipton RB. Psychiatric comorbidity of migraine. *Headache*. 2006;46(9):1327-1333.
13. Tunks ER, Crook J, Weir R. Epidemiology of chronic pain with psychological comorbidity: prevalence, risk, course and prognosis. *Can J Psychiatry*. 2008;53(4):224-234.
14. Frey WH. Census Projects New "Majority Minority" Tipping Points. Available at https://www.brookings.edu/opinions/census-projects-new-majority-minority-tipping-points/. Last accessed September 11, 2024.
15. Frey WH. Shift to a Majority-Minority Population in the U.S. Happening Faster than Expected. Available at https://www.brookings.edu/blog/up-front/2013/06/19/shift-to-a-majority-minority-population-in-the-u-s-happening-faster-than-expected. Last accessed September 11, 2024.
16. Robinson-Lane SG, Booker SQ. Culturally responsive pain management for black older adults. *J Gerontol Nurs*. 2017;43(8):33-41.
17. U.S. Census Bureau. Overview of Race and Hispanic Origin. Available at https://www.census.gov/content/dam/Census/library/publications/2011/dec/c2010br-02.pdf. Last accessed September 11, 2024.
18. Vos T, Allen C, Arora M. Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2017;390:1211-1259.
19. Zelaya CE, Dahlhamer JM, Lucas JW, Connor EM. Chronic pain and high-impact chronic pain among U.S. adults, 2019. *NCHS Data Brief*. 2020;390.
20. Pew Research Center. The Demographics of Asian Americans. Available at http://www.pewsocialtrends.org/2013/04/04/asian-groups-in-the-u-s. Last accessed September 11, 2024.
21. Ong P, Ong E. The Future of Asian America in 2040 Asian American Electorate to Double. Available at https://escholarship.org/content/qt5c07t9tk/qt5c07t9tk_noSplash_fd0688434f0006c3db86dc48f23c5857.pdf. Last accessed September 11, 2024.
22. Lee E, Mock MR. Asian families: an overview. In: McGoldrick M, Giordano J, Garcia-Preto N (eds). *Ethnicity and Family Therapy*. 3rd ed. New York, NY: The Guilford Press; 2005: 269-289.
23. U.S. Census Bureau. We the People: Asians in the United States: Census 2000 Special Reports. Available at https://usa.usembassy.de/etexts/soc/we_asians_2000.pdf. Last accessed September 11, 2024.
24. Lee E. *Working with Asian Americans: A Guide for Clinicians*. New York, NY: The Guilford Press; 1997.
25. U.S. Census Bureau. Hispanic Origin. Available at https://www.census.gov/topics/population/hispanic-origin.html. Last accessed September 11, 2024.
26. Pew Hispanic Center. Hispanic Origin Profiles. Available at http://www.pewhispanic.org/2012/06/27/country-of-origin-profiles. Last accessed September 11, 2024.
27. Mills S, Nicolson KP, Smith BH. Chronic pain: a review of its epidemiology and associated factors in population-based studies. *British Journal of Anaesthesia*. 2019;123(2):e273-e283.
28. Hylands-White N, Duarte R, Raphael J. An overview of treatment approaches for chronic pain management. *Rheumatol Int*. 2017;37(1):29-42.

29. U.S. Census Bureau. We the People: American Indians and Alaska Natives in the United States. Available at https://www.census.gov/library/publications/2006/dec/censr-28.html. Last accessed September 11, 2024.
30. Smith TJ, Hillner BE. The cost of pain. *JAMA Network Open*. 2019;2(4):e191532.
31. U.S. Census Bureau. National Black (African American) History Month: February 2024. Available at https://www.census.gov/newsroom/facts-for-features/2024/black-history-month.html. Last accessed September 11, 2024.
32. Sluka KA, Maixner W, Savage SR, Fillingim RB. A pain research agenda for the 21st century. *J Pain*. 2014;15(12):1203-1214.
33. Gordon MM. *Assimilation in American Life*. New York, NY: Oxford University Press; 1964.
34. Lum D. *Culturally Competent Practice*. 4th ed. Belmont, CA: Brooks/Cole; 2011.
35. Hodge JL, Struckmann DK, Trost LD. *Cultural Bases of Racism and Group Oppression*. Berkeley, CA: Two Riders Press; 1975.
36. Sue DW, Sue D. *Counseling the Culturally Different: Theory and Practice*. 7th ed. New York, NY: John Wiley & Sons; 2016.
37. Jackson AP, Meadows FB. Getting to the bottom to understand the top. *J Couns Dev*. 1991;70:72-76.
38. Kitano HHL. *Race Relations*. 5th ed. Upper Saddle River, NJ: Prentice Hall; 1997.
39. Hanago GA, Siebeck M, Dira SJ, Tadesse T, Irnich D. Perception of pain expression among surgical patients and families from three ethnic groups of a nation: a multicenter qualitative study. *Journal of Pain Research*. 2024;17:241-251.
40. Okazaki S, Saw A. Culture in Asian American community psychology: beyond the East-West binary. *Am J Community Psychol*. 2011;47(1/2):144-156.
41. Alba RD. *Ethnic Identity: The Transformation of White America*. New Haven, CT: Yale University Press; 1992.
42. Green JW. *Cultural Awareness in the Human Services: A Multi-Ethnic Approach*. 3rd ed. Boston, MA: Allyn and Bacon; 1999.
43. Waite R, Calamaro CJ. Cultural competence: a systematic challenge to nursing education, knowledge exchange, and the knowledge development process. *Perspect Psychiatr Care*. 2010;46(1):74-80.
44. Fong R, Furuto SBCL. Culturally competent social work practice: past and present. In: Fong R, Furuto SBCL (eds). *Culturally Competent Practice: Skills, Interventions, and Evaluations*. Needham Heights, MA: Allyn & Bacon; 2001: 1-9.
45. Bates MS, Rankin-Hill L, Sanchez-Ayendez M. The effects of the cultural context of health care on treatment of and response to chronic pain and illness. *Soc Sci Med*. 1997;45(9):1433-1447.
46. Narayan MC. Culture's effect on pain assessment and management. *Am J Nurs*. 2010;110(4):38-47.
47. Cleeland CS, Nakamura Y, Mendoza TR, Edwards KR, Douglas J, Serlin RC. Dimensions of the impact of cancer pain in a four country sample: new information from multidimensional scaling. *Pain*. 1996;67(2-3):267-273.
48. Zborowski M. Cultural components in responses to pain. *J Soc Issues*. 1952;8(4):16-30.
49. Edwards CL, Fillingim RB, Keefe F. Race, ethnicity, and pain. *Pain*, 2001;94(2):133-137.
50. Rahim-Williams FB, Riley JL III, Herrera D, Campbell CM, Hastie BA, Fillingim RB. Ethnic identity predicts experimental pain sensitivity in African Americans and Hispanics. *Pain*. 2007;129(1-2):177-184.
51. Chan MYP, Hamamura T, Janschewitz K. Ethnic differences in physical pain sensitivity: role of acculturation. *Pain*. 2013;154(1):119-123.
52. Finnström B, Söderhamn O. Conceptions of pain among Somali women. *J Adv Nurs*. 2006;54(4):418-425.
53. Gaston-Johansson F, Albert M, Fagan E, Zimmerman L. Similarities in pain descriptions of four cultural groups. *J Pain Symptom Manage*. 1990;5(2):94-100.
54. Summers RL, Cooper GJ, Carlton FB, Andrews ME, Kolb JC. Prevalence of atypical chest pain descriptions in a southern population. *Am J Med Sci*. 1999;318(3):142-145.
55. Cherry B, Giger JN. African Americans. In: Giger JN (ed). *Transcultural Nursing: Assessment and Interventions*. 7th ed. St. Louis, MO: Elsevier; 2017: 159-207.
56. Chung WY, Wong CH, Yang JCS, Tan PPC. The use of Cantonese pain descriptors among healthy young adults in Hong Kong. *Acta Anaesthesiol Sin*. 1998;36(4 Suppl):S1-S11.
57. U.S. Census Bureau. Asian American and Pacific Islander Heritage Month: May 2021. Available at https://www.census.gov/newsroom/facts-for-features/2021/asian-american-pacific-islander.html. Last accessed September 11, 2024.
58. Haozous EA, Knobf MT, Brant JM. Understanding the cancer pain experience in American Indians of the Northern Plains. *Psychooncology*. 2011;20(4):404-410.
59. Spencer C, Burke P. The impact of culture on pain management. *Med-Surg Matters*. 2011;20(4):13-15.
60. Cassisi JE, Umeda M, Deisinger JA, Sheffer C, Lofland KR, Jackson C. Patterns of pain descriptor usage in African Americans and European Americans with chronic pain. *Cultur Divers Ethnic Minor Psychol*. 2004;10(1):81-89.
61. Villarruel AM, Ortiz de Montellano B. Culture and pain: a Mesoamerican perspective. *Adv Nurs Sci*. 1992;15(1):21-32.
62. Villarruel AM. Mexican-American cultural meanings, expressions, self-care and dependent-care actions associated with experiences of pain. *Res Nurs Health*. 1995;18(5):427-436.
63. Strickland CJ. The importance of qualitative research in addressing cultural relevance: experiences from research with Pacific Northwest Indian women. *Health Care Women Int*. 1999;20(5):517-525.

64. Koffman J, Morgan M, Edmonds P, Speck P, Higginson I. Cultural meanings of pain: a qualitative study of Black Caribbean and White British patients with advanced cancer. *Palliat Med*. 2008;22(4):350-359.

65. Juarez G. Culture and pain. *Quality of Life*. 1997;4(4):86-94.

66. Sobralske M, Katz J. Culturally competent care of patients with acute chest pain. *J Am Acad Nurse Pract*. 2005;17(9):342-349.

67. Nayak S, Shiflett SC, Eshun S, Levine FM. Culture and gender effects in pain beliefs and the prediction of pain tolerance. *Cross-Cult Res*. 2000;34(2):135-151.

68. Singh NN, Mckay JD, Singh AN. Culture and mental health: nonverbal communication. *J Child Fam Stud*. 1998;7(4):403-409.

69. Lynch EW. Developing cross-cultural competence. In: Lynch EW, Hanson MJ (eds). *A Guide for Working with Children and Their Families: Developing Cross-Cultural Competence*. 4th ed. Baltimore, MD: Paul H. Brookes Publishing, Co.; 2011: 41-78.

70. Okun BF, Fried J, Okun ML. *Understanding Diversity: A Learning-as-Practice Primer*. Pacific Grove, CA: Brooks/Cole Publishing Co.; 1999.

71. Callister LC, Khalaf I, Semenic S, Vehvilainen-Julkunen K. The pain of childbirth: perceptions of culturally diverse women. *Pain Manag Nurs*. 2003;4(4):145-154.

72. Jimenez N, Garroutte E, Kundu A, Morales L, Buchwald D. A review of the experience, epidemiology, and management of pain among American Indian, Alaska Native, and aboriginal Canadian peoples. *J Pain*. 2011;12(5):511-522.

73. Callister LC. Cultural influences on pain perceptions and behaviors. *Home Health Care Management Practic*. 2003;15(3):207-211.

74. Jones A, Kwoh C, Groeneveld P, Mor M, Geng G, Ibrahim SA. Investigating racial differences in coping with chronic osteoarthritis pain. *J Cross Cult Gerontol*. 2008;23(4):339-347.

75. Bardwell WA, Ancoli-Israel S, Dimsdale JE. Types of coping strategies are associated with increased depressive symptoms in patients with obstructive sleep apnea. *Sleep*. 2001;24(8):905-909.

76. Abraído-Lanza AF, Vásquez E, Echeverría SE. En las manos de Dios [in God's hands]: religious and other forms of coping among Latinos with arthritis. *J Consult Clin Psychol*. 2004;72(1):91-102.

77. Keefe FJ. Somers TJ. Psychological approaches to understanding and treating arthritis pain. *Rheumatology*. 2010;6:210-216.

78. Keefe FJ, Lumley M, Anderson T, Lynch T, Studts JL, Carson KL. Pain and emotion: new research directions. *J Clin Psychol*. 2001;57(4):587-607.

79. Fabian LA, McGuire L, Goodin BR, Edwards RR. Ethnicity, catastrophizing, and qualities of the pain experience. *Pain Med*. 2011;12(2):314-321.

80. Chun C, Moos RH, Cronkite RC. Culture: a fundamental context for the stress and coping paradigm. In: Wong PTP, Wong LCJ, Lonner WJ (eds). *Handbook of Multicultural Perspectives on Stress and Coping*. New York, NY: Springer; 2005: 29-53.

81. Triandis HC. Theoretical and methodological approaches to the study of collectivism and individualism. In: Kim U, Triandis HC, Kagitcibasi C, Choi S, Yoon G (eds). *Individualism and Collectivism*. Thousand Oaks, CA: Sage; 1994: 41-45.

82. Rahim-Williams B, Riley JL, Williams AKK, Fillingim RB. A quantitative review of ethnic group difference in experimental pain response: do biology, psychology, and culture matter? *Pain Med*. 2012;13(4):522-540.

83. Meghani SH, Houldin AD. The meanings of and attitudes about cancer pain among African Americans. *Oncol Nurs Forum*. 2007;34(6):1179-1186.

84. Rogler LH, Cortes DE. Help-seeking pathways: a unifying concept in mental health care. *Am J Psych*. 1993;150(4):554-561.

85. Saint Arnault D. Cultural determinants of help seeking: a model for research and practice. *Res Theory Nurs Pract*. 2009;23(4):259-278.

86. Robbins J, Kirmayer L. Attributions of common somatic symptoms. *Psychol Med*. 1991;21(4):1029-1045.

87. Tamayo-Sarver JH, Hinze SW, Cydulka RK, Baker DW. Racial and ethnic disparities in emergency department analgesic prescription. *Am J Public Health*. 2003;93(12):2067-2073.

88. Rust G, Nembhard WN, Nichols, et al. Racial and ethnic disparities in the provision of epidural analgesia to Georgia Medicaid beneficiaries during labor and delivery. *Am J Obstet Gynecol*. 2004;191(2):456-462.

89. Cintron A, Morrison RS. Pain and ethnicity in the United States: a systematic review. *J Palliat Med*. 2006;9(6):1454-1473.

90. Ezenwa MO, Ameringer S, Ward SE, Serlin RC. Racial and ethnic disparities in pain management in the United States. *J Nurs Scholarsh*. 2006;38(3):225-233.

91. Chen CH, Tang ST, Chen CH. Meta-analysis of cultural differences in Western and Asian patient-perceived barriers to managing cancer pain. *Palliat Med*. 2012;26(3):206-221.

92. Crowley-Matoka M, Saha S, Dobscha SK, Burgess DJ. Problems of quality and equity in pain management: exploring the role of the biomedical culture. *Pain Med*. 2009;10(7):1312-1324.

93. Davidhizar R, Giger JN. A review of the literature on care of clients in pain who are culturally diverse. *Int Nurs Rev*. 2004;51(1): 47-55.

94. Tait RC, Chibnall JT. Racial and ethnic disparities in the evaluation and treatment of pain: psychological perspectives. *Prof Psychol Res Pr*. 2005;36(6):595-601.

95. Morrison RS, Wallenstein S, Natale DK, Senzel RS, Huang LL. "We don't carry that:" failure of pharmacies in predominantly nonwhite neighborhoods to stock opioid analgesics. *N Eng J Med*. 2000;6(342):1023-1026.

96. Anderson KO, Green CR, Payne R. Racial and ethnic disparities in pain: causes and consequences of unequal care. *J Pain*. 2009;10(12):1187-1204.

97. Campbell CM, Edwards RR. Ethnic differences in pain and pain management. *Pain Manag*. 2012;2(3):219-230.

98. Green CR, Anderson KO, Baker TA, et al. The unequal burden of pain: confronting racial and ethnic disparities in pain. *Pain Med*. 2003;4(3):277-294.

99. Davidhizar RE, Hart AN. Pain management: delivering culturally appropriate care. *Healthcare Traveler*. 2005;12(12):32-41.

100. Kahl C, Cleland JA. Visual analogue scale, numeric pain rating scale and the McGill Pain Questionnaire: an overview of psychometric properties. *Phys Ther Rev*. 2005;10(2):123-128.

101. Flaherty SA. Pain measurement tools for clinical practice and research. *AANA J*. 1996;64(2):133-140.

102. Williamson A, Hoggart B. Pain: a review of three commonly used pain rating scales. *J Clin Nurs*. 2005;14(7):798-804.

103. Melzack R. The McGill Pain Questionnaire: major properties and scoring methods. *Pain*. 1975;1(3):277-299.

104. Melzack R. The short-form McGill Pain Questionnaire. *Pain*. 1987;30(2):191-197.

105. Cleeland CS. The Brief Pain Inventory: User Guide. Available at https://www.mdanderson.org/research/departments-labs-institutes/departments-divisions/symptom-research/symptom-assessment-tools.html. Last accessed September 11, 2024.

106. Huang KTL, Owino C, Vreeman RC, et al. Assessment of the face validity of two pain scales in Kenya: a validation study using cognitive interviewing. *BMC Palliative Care*. 2012;11(5):1-9.

107. Burhansstipanov L, Hollow W. Native American cultural aspects of oncology nursing care. *Semin Oncol Nurs*. 2001;17(3):206-219.

108. Liu JYW, Chung JWY, Wong TKS. The psychometric properties of Chinese pain intensity verbal rating scale. *Acta Anaesthesiol Scand*. 2003;47(8):1013-1019.

109. Costa LDM, Maher CG, McAuley JH, Costa LOP. Systematic review of cross-cultural adaptations of McGill Pain Questionnaire reveals a paucity of clinimetric testing. *J Clin Epidemiol*. 2009;62(9):934-943.

110. Escalante A, Lichtenstein MJ, Rios N, Hazuda HP. Measuring chronic rheumatic pain in Mexican Americans: cross-cultural adaptation of the McGill Pain Questionnaire. *J Clin Epidemiol*. 1996;49(12):1389-1399.

111. Arimura T, Hosoi M, Tsukiyama Y, et al. Pain questionnaire development focusing on cross-cultural equivalence to the original questionnaire: the Japanese version of the Short-Form McGill Pain Questionnaire. *Pain Med*. 2012;13(4):541-551.

112. Zinke JL, Lam CS, Harden RN, Fogg L. Examining the cross-cultural validity of the English short-form McGill Pain Questionnaire using the matched moderated regression methodology. *Clin J Pain*. 2010;26(2):153-162.

113. Kumar SP. Utilization of Brief Pain Inventory as an assessment tool for pain in patients with cancer: a focused review. *Indian J Palliat Care*. 2011;17(2):108-115.

114. Ger LP, Ho ST, Sun WZ, Wang MS, Cleeland CS. Validation of the Brief Pain Inventory in a Taiwanese population. *J Pain Symptom Manage*. 1999;18(5):316-322.

115. Ferreira KA, Teixeira M.J, Mendonza TR, Cleeland, CS. Validation of brief pain inventory to Brazilian patients with pain. *Support Care Cancer*. 2011;19(4):505-511.

116. Lasch KE. Culture, pain, and culturally sensitive pain care. *Pain Manag Nurs*. 2000;1(3):16-22.

117. Burns, ST. Counseling adult clients experiencing chronic pain. *J Couns Dev*. 2010;88(4):483-490.

118. Weiner KA. Empowering the pain patient to make treatment decisions. *Home Health Care Management & Practice*. 2003;15:198-202.

119. Robertson LA, Smith HL, Ray SL, Jones KD. Counseling clients with chronic pain: a religiously oriented cognitive behavior framework. *J Couns Dev*. 2009;87(3):373-379.

120. Briggs E. Cultural perspectives on pain management. *J Perioper Pract*. 2008;18(11):468-471.

121. Lin YC, Lee ACC, Kemper KJ, Berde CB. Use of complementary and alternative medicine in pediatric pain management service: a survey. *Pain Med*. 2005;6(6):452-458.

122. Ringold S, Beukelman T, Nigrovic PA, Kimura Y, CARRA Registry Site Principal Investigators. Race, ethnicity, and disease outcomes in juvenile idiopathic arthritis: a cross-sectional analysis of the Childhood Arthritis and Rheumatology Research Alliance (CARRA) Registry. *J Rheumatol*. 2013;40(6):936-942.

123. Phelan SM, Hardeman RR. Health professionals' pain management decisions are influenced by their role (nurse or physician) and by patient gender, age, and ethnicity. *Evid Based Nurs*. 2015;18(2):58.

124. Johnson TJ, Weaver MD, Borrero S, et al. Association of race and ethnicity with management of abdominal pain in the emergency department. *Pediatrics*. 2013;132(4):e851-e858.

125. Hastie BA, Riley JL 3rd, Kaplan L, et al. Ethnicity interacts with the OPRM1 gene in experimental pain sensitivity. *Pain*. 2012;153(8):1610-1619.

126. Ferreira-Valente MA, Pais-Ribeiro JL, Jensen MP. Associations between psychosocial factors and pain intensity, physical functioning, and psychological functioning in patients with chronic pain: a cross-cultural comparison. *Clinical Journal of Pain*. 2014;30(8):713-723.

127. Goodin BR, Kronfli T, King CD, Glover TL, Sibille K, Fillingim RB. Testing the relation between dispositional optimism and conditioned pain modulation: does ethnicity matter? *J Behav Med*. 2013;36(2):165-174.

128. Alabas OA, Tashani OA, Johnson MI. Effects of ethnicity and gender role expectations of pain on experimental pain: a cross-cultural study. *Eur J Pain*. 2013;17(5):776-786.

129. Martin EM, Barkley TW Jr. Improving cultural competence in end-of-life pain management. *Nursing*. 2016;46(1):32-41.

130. Rahim-Williams B, Riley JL 3rd, Williams AK, Fillingim RB. A quantitative review of ethnic group differences in experimental pain response: do biology, psychology, and culture matter? *Pain Med*. 2012;13(4):522-540.

131. Gagnon CM, Matsuura JT, Smith CC, Stanos SP. Ethnicity and interdisciplinary pain treatment. *Pain Pract*. 2014;14(6):532-540.

132. Pew Research Center. U.S. Hispanic Population Growth has Leveled Off. Available at http://www.pewresearch.org/fact-tank/2017/08/03/u-s-hispanic-population-growth-has-leveled-off. Last accessed July 24, 2021.

133. Budiman A, Ruiz NG. Asian Americans are the Fastest Growing Racial or Ethnic Group in the U.S. Available at https://www.pewresearch.org/fact-tank/2021/04/09/asian-americans-are-the-fastest-growing-racial-or-ethnic-group-in-the-u-s/. Last accessed September 1, 2021.

134. Ehrhardt MD, Gray KN, Kuhnet BL, et al. A qualitative analysis of pain meaning: results from the Oklahoma Study of Native American Pain Risk (OK-SNAP). *Ethnicity & Health*. 2022;27(3):721-732.

135. U.S. Census Bureau. Facts for Features: American Indian and Alaska Native Heritage Month. Available at https://www.census.gov/newsroom/facts-for-features/2020/aian-month.html. Last accessed September 11, 2024.

136. Wilner AN. Pain Management Across Cultures. Available at https://www.medscape.org/viewarticle/581930. Last accessed July16, 2024.

137. Booker SQ. Controlling pain: are nurses prepared to care for Black American patients in pain? *Nursing*. 2015;45(1):66-69.

138. Aufiero M, Stankewicz H, Quazi S, Jacoby J, Stoltzfus J. Pain perception in Latino vs. Caucasian and male vs. female patients: Is there really a difference? *West J Emerg Med*. 2017;18(4):737-742.

139. Sharma S, Pathak A, Jensen MP. Words that describe chronic musculoskeletal pain: implications for assessing pain quality across cultures. *J Pain Res*. 2016;9:1057-1066.

140. Nortjé N, Albertyn R. The cultural language of pain: a South African study. *S Afr Fam Pract*. 2015;57(1):24-27.

141. Booker SQ. African Americans' perceptions of pain and pain management: a systematic review. *J Transcult Nurs*. 2016;27(1):73-80.

142. Hollingshead NA, Ashburn-Nardo L, Stewart JC, Hirsh AT. Critical review: the pain experience of Hispanic Americans: a critical literature review and conceptual model. *J Pain*. 2016;17(5):513-528.

143. Tung WC, Li Z. Pain beliefs and behaviors among Chinese. *Home Health Care Management & Practice*. 2015;27(2):95-97.

144. Lovering S. Cultural attitudes and beliefs about pain. *J Transcult Nurs*. 2006;17(4):389-395.

145. Meints SM, Miller MM, Hirsh AT. Differences in pain coping between Black and White Americans: a meta-analysis. *J Pain*. 2016;17(6):642-653.

146. Pillay T, van Zyl HA, Blackbeard D. Chronic pain perception and cultural experience. *Procedia Soc Behav Sci*. 2014;113:151-160.

147. Cheung CW, Choi SW, Wong SSC, Lee Y, Irwin M. Changes in prevalence, outcomes, and help-seeking behavior of chronic pain in an aging population over the last decade. *Pain Pract*. 2017;17(5):643-654.

148. Singhal A, Tien Y, Hsia RY. Racial-ethnic disparities in opioid prescriptions at emergency department visits for conditions commonly associated with prescription drug abuse. *PLoS One*. 2016;11(8):1-14.

149. Haozous EA, Doorenbos AZ, Stoner S. Pain management experiences and the acceptability of cognitive behavioral strategies among American Indians and Alaska Natives. *J Transcult Nurs*. 2016;27(3):233-240.

150. Karcioglu O, Topacoglu H, Dikme O, Dikme O. A systematic review of the pain scales in adults: which to use? *Am J Emerg Med*. 2018;36(4):707-714.

151. Berry M. Ethnicity, culture and pain: can an anthropological perspective aid clinical practice? *Journal of Physiotherapy Pain Association*. 2015;39:29-34.

152. Eaton LH, Meins AR, Rue T, Doorenbos AZ, Langford DJ, Tauben DJ. Use of self-management interventions for chronic pain management: a comparison between rural and nonrural residents. *Pain Manag Nurs*. 2018;19(1):8-13.

153. Majeed MH, Ali AA, Sudak DM. Review article: mindfulness-based interventions for chronic pain: evidence and applications. *Asian J Psychiatr*. 2018;32:79-83.

154. Krogstad JM. Hispanics have Accounted for More than Half of Total U.S. Population Growth since 2010. Available at https://www.pewresearch.org/fact-tank/2020/07/10/hispanics-have-accounted-for-more-than-half-of-total-u-s-population-growth-since-2010. Last accessed September 11, 2024.

155. U.S. Census Bureau. American Indian and Alaska Native Heritage Month: November 2017. Available at https://www.census.gov/newsroom/facts-for-features/2017/aian-month.html. Last accessed September 11, 2024.

156. National Institute of Health. NIH Study Finds High Rates of Persistent Chronic Pain Among U.S. Adults. Available at https://www.nih.gov/news-events/news-releases/nih-study-finds-high-rates-persistent-chronic-pain-among-us-adults. Last accessed September 11, 2024.

157. Yoshikawa K, Brady B, Perry MA, Devan H. Sociocultural factors influencing physiotherapy management in culturally and linguistically diverse people with persistent pain: a scoping review. *Physiotherapy*. 2020;107:292-305.

158. Bostick GP, Norman KE, Sharma A, Toxopeus R, Irwin G, Dhillon R. Improving cultural knowledge to facilitate cultural adaptation of pain management in a culturally and linguistically diverse community. *Physiotherapy Canada*. 2021;73(1):19-25.

159. Moss K, Atalia S, Iversen L, et al. Diverse perceptions of experimental thermal pain: race-related differences between and within sex. *Pain Management Nursing*. 2021;22(2):240-240.

160. Ahn H, Sorkpor SK, Kim M, et al. The relationship between acculturation and experimental pain sensitivity in Asian Americans with knee osteoarthritis. *Pain Research & Management*. 2018;2018:9128015.

161. Strong J, Mathews T, Sussex R, New F, Hoey S, Mitchell G. Pain language and gender differences when describing a past pain event. *Pain*. 2009;145:86-95.

162. Young JR, Sih C, Hogg MM, Anderson-Montoya BL, Fasano HT. Qualitative assessment of face validity and cross-cultural acceptability of the Faces Pain Scale: "revised" in Cameroon. *Qualitative Health Research*. 2018;28(5):832-843.

163. Meints SM, Cortes A, Morais CA, Edwards RR. Racial and ethnic differences in the experience and treatment of noncancer pain. *Pain Management*. 2019;9(3):317-334.

164. Lane P, Smith D. Culture, ageing and the construction of pain. *Geriatrics*. 2018;3(3):40.

165. Sharma S, Ferreira-Valente A, de C Williams AC, Abbott JH, Pais-Ribeiro J, Jensen MP. Group differences between countries and between languages in pain-related beliefs, coping, and catastrophizing in chronic pain: a systematic review. *Pain Medicine*. 2020;21(9):1847-1862.

166. Cancio R. Experiences with machismo and pain: Latino veterans. *American Journal of Men's Health*. 2020;14(6):1-12.

167. Nguyen THH. Exploring the association between religious values and communication about pain coping strategies: a case study with Vietnamese female cancer patients. *Theory & Practice in Language Studies*. 2018;8(9):1131-1138.

168. Li Y, Coppieters MW, Setchell J, Hodges PW, Scholten-Peeters G. How do people in China think about causes of their back pain? A predominantly qualitative cross-sectional survey. *BMC Musculoskeletal Disorders*. 2020;21(1):476.

169. Ehrhardt M, Gray KN, Kuhn BL, et al. A qualitative analysis of pain meaning: results from the Oklahoma study of Native American pain risk (OK-SNAP). *Ethn Health*. 2020;1-12.

170. Sharma S, Abbott JH, Jensen MP. Why clinicians should consider the role of culture in chronic pain. *Brazilian Journal of Physical Therapy*. 2018;22(5):345-346.

171. Orhan C, Van Looveren E, Cagnie B, Mukhtar NB, Lenoir D, Meeus M. Are pain beliefs, cognitions, and behaviors influenced by race, ethnicity, and culture in patients with chronic musculoskeletal pain: a systematic review. *Pain Physician*. 2018;21(6):541-558.

172. Ly DP. Racial and ethnic disparities in the evaluation and management of pain in the outpatient setting, 2006–2015. *Pain Medicine*. 2019;20(2):223-232.

173. Trawalter S, Hoffman KM. Got pain? Racial bias in perceptions of pain. *Social and Personality Psychology Compass*. 2015;9:146-157.

174. Johnson-Jennings M, Duran B, Hakes J, Paffrath A, Little MM. The influence of undertreated chronic pain in a national survey: prescription medication misuse among American Indians, Asian Pacific Islanders, Blacks, Hispanics and Whites. *SSM Population Health*. 2020;11:100563.

175. Mendes A. How race features in pain-treatment disparities. *British Journal of Community Nursing*. 2020;25(7):359-360.

176. Strong J, Nielsen M, Williams M, Huggins J, Sussex R. Quiet about pain: experiences of Aboriginal people in two rural communities. *The Australian Journal of Rural Health*. 2015;23(3):181-184.

177. Berry DL, Wilkie DJ, Thomas CR Jr, Fortner P. Clinicians communicating with patients experiencing cancer pain. *Cancer Investigation*. 2003;21(3):374-381.

178. Kawi J, Reyes AT, Arenas RA. Exploring pain management among Asian immigrants with chronic pain: self-management and resilience. *Journal of Immigrant & Minority Health*. 2019;21(5):1123-1136.

179. Gordon DB, Watt-Watson J, Hogans BB. Interprofessional pain education: with, from, and about competent, collaborative practice teams to transform pain care. *Pain Reports*. 2018;3(3):e663.

180. Raffaeli W, Tenti M, Corraro A, et al. Chronic pain: what does it mean? a review on the use of the term chronic pain in clinical practice. *Journal of Pain Research*. 2021;14:827-835.

181. Yong RJ, Mullins PM, Bhattacharyya N. Prevalence of chronic pain among adults in the United States. *Pain*. 2022;163(2):e328-e332.

182. Zajacova A, Grol-Prokopczyk H, Fillingim R. Beyond Black vs White: racial/ethnic disparities in chronic pain including Hispanic, Asian, Native American, and multiracial US adults. *Pain*. 2022;163(9):1688-1699.

183. U.S. Pain Foundation. The Financial and Emotional Cost of Chronic Pain. Available at https://uspainfoundation.org/news/the-financial-and-emotional-cost-of-chronic-pain. Last accessed September 12, 2024.

184. Rabe M. Exploring the Racial and Ethnic Diversity of Various Age Groups. Available at https://www.census.gov/newsroom/blogs/random-samplings/2023/09/exploring-diversity.html. Last accessed September 12, 2024.

185. U.S. Census Bureau. Hispanic Heritage Month: 2024. Available at https://www.census.gov/newsroom/facts-for-features/2024/hispanic-heritage-month.html. Last accessed September 12, 2024.

186. USA Facts. What Will America's Population Look Like by 2100? Available at https://usafacts.org/articles/what-will-americas-population-look-like-by-2100. Last accessed September 12, 2024.

187. Tamir C. The Growing Diversity of Black America. Available at https://www.pewresearch.org/social-trends/2021/03/25/the-growing-diversity-of-black-america. Last accessed September 12, 2024.

188. Lopez MH, Moslimani M. Key Facts About the Nation's 47.9 Million Black Americans. Available at https://www.pewresearch.org/short-reads/2024/01/18/key-facts-about-black-americans. Last accessed September 12, 2024.

189. U.S. Census Bureau. Asian American, Native Hawaiian and Pacific Islander Heritage Month: May 2024. Available at https://www.census.gov/newsroom/facts-for-features/2024/asian-american-pacific-islander.html. Last accessed September 12, 2024.

190. U.S. Census Bureau. Facts for Features: American Indian and Alaska Native Heritage Month: November 2023. Available at https://www.census.gov/newsroom/facts-for-features/2023/aian-month.html. Last accessed September 12, 2024.

191. Sánchez-Rivera AI, Jacobs P, Spence C. A Look at the Largest American Indian and Alaska Native Tribes and Villages in the Nation, Tribal Areas and States. Available at https://www.census.gov/library/stories/2023/10/2020-census-dhc-a-aian-population.html. Last accessed September 12, 2024.

192. Shrider EA, Creamer J. *Current Population Reports, P60-280. Poverty in the United States: 2022*. Washington, DC.: U.S. Government Publishing Office; 2023.

193. Lewis C, Cohen PR, Bahl D, Levine EM, Khaliq W. Race and ethnic categories: a brief review of global terms and nomenclature. *Cureu*. 2023;15(7):e41253.

194. Kelly MA, Slatyer S, Myers H, Gower S, Mason J, Lasater K. Using audio-visual simulation to elicit nursing students' noticing and interpreting skills to assess pain in culturally diverse patients. *Clinical Simulation in Nursing*. 2022;71:31-40.

195. Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between Blacks and Whites. *Proceedings of the National Academy of Sciences*. 2016;113:4296-4301.

196. Lor M, Vang X, Rabago D, Brown RL, Backonja M. "It hurts as if...:" pain-associated language, visual characterization, and storytelling in Hmong adults. *Pain Medicine*. 2019;21(8):1690-1702.

197. Lor M, Rabago D, Backonja M. "There are so many nuances...:" health care providers' perspectives of pain communication with Hmong patients in primary care settings. *Journal of Transcultural Nursing*. 2021;32(5):575-582.

198. Lewis GN, Shaikh N, Wang G, Chaudhary S, Bean DJ, Terry G. Chinese and Indian interpretations of pain: a qualitative evidence synthesis to facilitate chronic pain management. *Pain Practice*. 2023;23(6):647-663.

199. de Moraes EB, Dal Fabbro DR, de Oliveira LB, Leão ER. Pain management of Amazon indigenous peoples: a community-based study. *Journal of Pain Research*. 2021;14:1969-1980.

200. Labao HC. Correlates of coping among Filipino migrant workers in Malaysia with musculoskeletal pain. *European Journal of Physiotherapy*. 2021;23(3):179-184.

201. Thompson OJ, Powell-Roach K, Taylor JL, Terry EL, Booker SQ. Pain catastrophizing: a patient-centered approach to assessment. *Nursing*. 2022;52(4):26-30.

202. Crowe RP, Kennel J, Fernandez AR, et al. Racial, ethnic, and socioeconomic disparities in out-of-hospital pain management for patients with long bone fractures. *Annals of Emergency Medicine*. 2023;82(5):535-545.

203. Thurston KL, Zhang SJ, Wilbanks BA, Billings R, Aroke EN. A systematic review of race, sex, and socioeconomic status differences in postoperative pain and pain management. *Journal of PeriAnesthesia Nursing*. 2023;38(3):504-515.

204. Nelson E-UE, Akintunde AA, Ojo YA. Healthcare interactions and barriers to chronic pain management: a qualitative study of people who use drugs in Uyo, Nigeria. *Cogent Social Sciences*. 2023;9(1):1-15.

205. Webb K, Kelley A, Restad D, et al. Complementary alternative medicine: a culturally centered approach to managing chronic pain from one American Indian community. *American Indian and Alaska Native Mental Health Research*. 2023;30(2):55-69.

206. Rogger R, Bello C, Romero CS, Urman RD, Luedi MM, Filipovic MG. Cultural framing and the impact on acute pain and pain services. *Current Pain and Headache Reports*. 2023;27:429-436.

207. Brandão T, Campos L, de Ruddere L, Goubert L, Bernardes SF. Classism in pain care: the role of patient socioeconomic status on nurses' pain assessment and management practices. *Pain Medicine*. 2019;20(11):2094-2105.

208. Bostick G, Norman KE, Sharma A, Toxopeus R, Irwin G, Dhillon R. Improving cultural knowledge to facilitate cultural adaptation of pain management in a culturally and linguistically diverse community. *Physiotherapy Canada*. 2021;73(1):19-25.

209. Benes LL, Keef FJ, DeBar LL. Treating persistent pain: a nurse co-led, interdisciplinary model for primary care. *Pain Management Nursing*. 2022;23(6):728-736.

210. Booker SQ, Baker TA, Epps F, Herr KA, Young HM, Fishman S. Interrupting biases in the experience and management of pain nurses can help address challenges faced by racially and ethnically diverse patients and caregivers. *Home Healthcare Now*. 2023;41(2):98-104.

Evidence-Based Practice Recommendations Citations

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