**Introduction to Palliative Care**

**Quality-of-Life Model**

**Psychological Well-Being**

Anxiety

Depression

Enjoyment/Leisure

Pain Distress

Happiness

Fear

Cognition/Attention

Source:

Ferrell, B.R., & Grant, M. (2000). *Quality-of-life model*. Duarte, CA: City of Hope National Medical

Center. Reprinted with permission. Available online at [www.cityofhope.org/NRE](http://www.cityofhope.org/NRE)

**Physical Well-Being & Symptoms**

Functional Ability

Strength/Fatigue

Sleep & Rest

Nausea

Appetite

Constipation

Pain

QOL

**Spiritual Well-Being**

Hope

Meaning

Suffering

Religiosity

**Social Well-Being**

Financial Burden

Caregiver Burden

Roles and Relationships

Affection/Sexual Function

Appearance

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.

|  |
| --- |
| Pain Management |

**Table 1: Pain Management Guidelines & Opioid Equianalgesic Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PAIN MANAGEMENT GUIDELINES** | | | | | |
| 1. **Use a multi-modal drug approach. Combine opioids with non-opioids and adjuvant analgesics as indicated. Integrate nonpharmacological approaches when feasible.** 2. **Base administration schedule on the analgesic's duration of effect. Best to use sustained release opioids for scheduled dosing and always use immediate release opioids for rescue or breakthrough dosing. Do not cut, crush or chew extended-release preparations. Some preparations include capsules that can be opened; sprinkles can be put in food/enteral feedings (check package insert).** 3. **In opioid naïve patients start with low dose, short acting opioids and titrate for effect.** 4. **Acetaminophen (APAP): Do not exceed 3000 mg q 24 hours for adults; and for older adults do not exceed 2000 mg q 24 hrs. Use lower doses or omit APAP if liver disease, review prescribed combination products as well as over the counter (OTC) medications.** 5. **Non-invasive routes preferred. For severe pain or rapidly escalating pain, it may be necessary to provide intravenous analgesics until the pain is managed. If oral, rectal, or transdermal dosing is no longer practical or appropriate, continuous subcutaneous or intravenous infusions are indicated.** 6. **Mild Pain: Start with simple analgesics; acetaminophen (APAP) or NSAIDs, with adjuvant analgesics as appropriate [for neuropathic pain].** 7. **Moderate to Severe Pain: When pain does not respond to non-opioid analgesics and adjuvants, consider adding an opioid. Drugs with APAP, ASA or NSAIDs in combination with opioids limit flexibility of dosing.** 8. **Titration: Increase by 25 to 50% for moderate pain; increase by 50 to 100% for severe pain. Calculate amount of opioid taken in last 24 hours [add breakthrough + maintenance doses] and administer as new 24-hour maintenance dose; calculate new breakthrough dose.** 9. **Breakthrough Pain Dosing: Scheduled dosing will maintain stable serum drug levels and provide consistent relief. Patients on long acting opioids or continuous parenteral infusions must have an order for breakthrough pain medication.  Frequent [generally more than 4 doses/24 hours] breakthrough dosing requires a change in the scheduled sustained release drug dose.  Oral breakthrough dose is ≈ 10-20% of the oral 24 hour baseline dose.  Peak effect of immediate-release oral opioid is ≈ one hour; may repeat dose every one hour if patient is not overly sedated.  IV/SQ breakthrough dose is ≈ 50 to 100% of the hourly IV/SQ rate.  Peak effect of IV opioids is ≈ 10-15 minutes; may repeat dose every 15 minutes if patient not overly sedated. Peak effect of SQ opioids is ≈ 30 minutes; may repeat dose every 30 minutes if patient not overly sedated. IM dosing not recommended.** 10. **Opioid rotation may be warranted when escalating doses are ineffective in relieving pain or when adverse effects persist despite aggressive management. When changing drug or route of administration, use equianalgesic doses. See drug chart on other side. If changing from one drug to another, the new drug may be more effective, because of differences in potency or drug bioavailability. Start at 50-75% of the amount calculated using the equianalgesic tables. Make sure breakthrough medication is available and titrate dose according to individual patient response. Consult pain or palliative specialist when switching to and from methadone.** 11. **Prevent and manage opioid side effects aggressively. Patients never become tolerant to the constipating effects of opioids. Always start stimulant laxative/softener combination with initiation of opioids.** 12. **To discontinue opioids taper gradually (10% per week reduction or slower) to patient response to avoid withdrawal symptoms.** 13. **Always educate patients and caregivers about pain medications, side effect management, safe storage, and disposal.** | | | | | |
| **PAIN SOURCES** | **PAIN CHARACTER** | | **DRUG CLASS/EXAMPLES** | | |
| **Nociceptive or Somatic Pain** | Well localized. Aching, throbbing | | * Acetaminophen/NSAIDs * Opioids | | |
| **Visceral Pain** | Injury to sympathetically innervated organs. Pain is vague in quality. Deep, dull, aching. Referred pain. | | * NSAIDs * Corticosteroids * Opioids | | |
| **Neuropathic Pain** | Results from damage to peripheral or central nervous system or both. Dysesthesia, burning, tingling, numbing, shooting electrical pain. May require higher doses of opioids. | | Adjuvants   * Anticonvulsants: gabapentin (Neurontin®), pregabalin (Lyrica®) * Tricyclic Antidepressants: nortriptyline (Pamelor®), desipramine (Norpramin®) * SNRI Antidepressants: duloxetine (Cymbalta®), venlafaxine (Effexor®) * Corticosteroids * Topical Anesthetic, lidocaine Patch 5% (Lidoderm®) or OTC lidocaine patch 4% * Opioids | | |
| **SIDE EFFECT** | **OPIOID SIDE EFFECT MANAGEMENT (See NRE Symptom Card)** | | | | |
| **Constipation** | Tolerance to opioid related constipation does not occur. Start with combined senna as stimulant and docusate (Colace®) as softener. Max 8/day. If no BM in 2 days, add a laxative [bisacodyl, lactulose, magnesium hydroxide (Milk of Magnesia®), polyethylene glycol]. Methylnaltrexone (Relistor®) SQ q 48 hours or naloxegol (Movantik®) PO QD or naldemedine (Symproic®) PO QD (for noncancer pain) if other measures ineffective [only for opioid-induced constipation]. | | | | |
| **Nausea/ Vomiting** | Rule out reversible causes, e.g. constipation. Prochlorperazine (Compazine®) 10 mg PO q 6 hr PRN or 25 mg suppository PR q 6 hr PRN. May add lorazepam (Ativan®) 0.5 mg q 6 hr PO/SL, PRN or metoclopramide (Reglan®) (also helpful for early satiety and constipation) 10 mg PO QID. Scopolamine TD (Transderm-Scop®) patch 1.5 mg q 3 days is effective for movement related nausea q 72 hrs. Haloperidol (Haldol®) 0.5 - 4 mg PO or IV/SQ q 6 hrs. | | | | |
| **Respiratory Depression** | Rare in opioid tolerant people as tolerance develops to sedation/drowsiness- closely monitor in opioid-naïve patients. Increased risk with obstructive sleep apnea, obesity, on benzodiazepines, or in those with respiratory compromise. | | | | |
| **References:**  Ferrell, B., & Paice, J. (Eds). (2019). *Oxford textbook of palliative nursing*, 5th Edition. New York, NY: Oxford University Press.  Dahlin, C., Coyne, P., & Ferrell, B. (Eds). (2016). *Advanced practice palliative nursing.* New York, NY: Oxford University Press.  **For additional resources, refer to:**  **City of Hope Nursing Research and Education Resources** [www.cityofhope.org/NRE](http://www.cityofhope.org/NRE); and  **ELNEC:** **End-of-Life Nursing Education Consortium** [www.aacnnursing.org/ELNEC](http://www.aacnnursing.org/ELNEC/Resources) | | | | | |
| **OPIOID EQUIANALGESIC TABLE** | | | | | |
| **DRUG** | | **DOSAGE FORM/STRENGTHS** | | **APPROXIMATE EQUIVALENCE** | |
| **IV/SQ** | **ORAL** |
| **Buprenorphine** | | **Transdermal:** Butrans 5, 7.5, 10, 15, 20 mcg/h  **Buccal Strip:** Belbuca™ 75,150, 300, 450, 600, 750, 900 mcg   * Q 12 – 24 hours   **Injection:** 0.3 mg/ml  **Medication-Assisted Therapy (MAT):** for treatment of heroin or recreational opioid use – not typically used for pain control – requires specialized wavier (see <https://www.samhsa.gov/medication-assisted-treatment>)   * Buprenorphine/naloxone film or tablets | | 0.3-0.4 mg | See package insert |
| **Codeine** | | **Rarely recommended:** a pro-drug dependent on CYP2D6 – (significant percentage of people are poor metabolizers and cannot obtain relief) | |  | 200 mg |
| **Fentanyl Parenteral** | |  | | 100 mcg |  |
| **Fentanyl**  **Transdermal**  Long acting; Not for opioid naïve patients | | **Fentanyl Transdermal:**  Duragesic® and generic **-** 12, 25, 37.5, 50, 62.5,75, 87.5, 100 mcg/hr   * Not for post op/acute pain * 12-24 hours for full onset * 12-24 hours to leave system | |  | 100 mcg patch q 2-3 days  **≈** 200 mg oral Morphine  q 24 hrs |
| **Fentanyl**  **Transmucosal Immediate  Release Fentanyl (TIRF)**  Not for opioid naïve patients  Requires TIRF-REMS compliance  [**https://www.tirfremsaccess.com/TirfUI/rems/home.action**](https://www.tirfremsaccess.com/TirfUI/rems/home.action) | | **Buccal Oral Lozenge:**   * Actiq® and generic – 200, 400, 600, 800, 1200, 1600 mcg   **Buccal Oral Tablet:**   * Fentora® – 100, 200, 400, 600, 800 mcg   **Sublingual Tablet:**   * Abstral® Fentanyl SL–100, 200, 400, 800 mcg   **Sublingual Spray:**   * Subsys® – 100, 200, 400, 600, 800 mcg spray   **Nasal Spray:**   * Lazanda® –100, 300, 400 mcg | | – – – | See package inserts |
| **Hydrocodone** | | **Hydrocodone/Acetaminophen❖ Tablets:**   * Vicodin® – 5/300 mg; Vicodin® ES – 7.5/300 mg; Lorcet® or Vicodin® HP – 10 mg/300 mg * Lortab® – 2.5/500 mg, 5/500 mg 7.5/500 mg, 10/500 mg * Norco® – 5/325 mg, 7.5/325 mg, 10/325 mg   **Liquid❖:** Hycet® – 7.5/325/15 mL or Lortab 10/300/15 mL  **Hydrocodone/Ibuprofen Tablets:** Vicoprofen® and generic – 7.5/200 mg  **Extended Release:** Hysingla®ER**\*** 20, 30, 40, 50, 60, 80, 100, 120 mg q 24 or Zohydro® ER**\***– 10, 15, 20, 30, 40, 50 mg q 12 hrs | | – – – | 20-30 mg |
| **Hydromorphone** | | **Tablets:** Hydromorphone (Dilaudid® and generic) – 2, 4, 8 mg  **Liquid:** Hydromorphone (Dilaudid®) – 1 mg/ml  **Extended Release:** Exalgo®**\*** – 8, 12, 16, 32 mg q 24 hrs  **Injection:** 1, 2, 4 mg/ml   * Dilaudid® HP – 10 mg/ml   **Suppository:** Hydromorphone – 3 mg | | 1.5 mg | 7.5 mg |
| **Methadone** | | Equivalency ratios for methadone are complex because of its long half-life, potency, and individual variations in pharmacokinetics. | | – – – | Consult with Pain/Palliative Care Specialist |
| **Morphine** | | **Immediate Release Tablets:**   * Morphine Sulfate Immediate Release - 15, 30 mg   **Liquid:**   * Morphine Sulfate Immediate Release Solution – 2 mg/ml, 4 mg/ml, 20 mg/ml   **Extended or Sustained Release Tablet:**   * Generic – 10,15, 20, 30, 45, 50, 60, 75, 80, 90, 100, 120, 200 mg q 12 hrs * MS Contin® – 15, 30, 60, 100, 200 mg q 8 or 12 hrs * Kadian® –10, 20, 30, 40, 50, 60, 70, 80, 100, 130, 150, 200 mg q 12-24 hrs   **Injection:** 2, 4, 5, 8, 10 mg/ml  **Suppository:** Rectal Morphine Sulfate (RMS) – 5, 10, 20, 30 mg | | 10 mg | 30 mg |
| **Oxycodone** | | **Immediate Release Tablets:**   * Oxycodone IR – 5, 10, 15, 20, 30 mg * Oxaydo – 5, 7.5 mg * Roxicodone® – 5, 15, 30 mg   **Oxycodone/Acetaminophen Tablets❖:**   * Endocet® – 5/325, 7.5/325, 10/325 mg * Percocet® and generics– 2.5/325, 5/325, 7.5/325, 10/325 mg * Primley™ – 2.5/300, 5/300, 7.5/300, 10/300 mg   **Extended or Sustained Release Tablets:**   * Oxycodone ER –10, 20, 40, 80 mg q 12 hrs * OxyContin®**\*** – 10, 15, 20, 30, 40, 60, 80 mg * Xtampza® ER**\*** – 9, 13.5, 18, 27, 36 mg q 12 hrs   **Liquid:** Oxycodone – 5 mg/5ml20 mg/ml | | – – – | 20 mg |
| **Oxymorphone** | | **Tablets:**   * Opana® – 5, 10 mg; Generic IR – 5, 10 mg * Generic ER –7.5, 10, 15, 20, 30, 40 mg   **Injection:** 1 mg/ml | | 1 mg | 10 mg |
| **Tapentadol** (opioid and norepinephrine reuptake inhibitor) | | **Tapentadol** **Tablets\*\*:** Nucynta® – 50, 75, 100 mg  **Extended Release:** Nucynta®ER– 50, 100, 150, 200, 250 mg q 12 hrs | |  | 150 mg |
| **Tramadol (**opioid and SNRI reuptake inhibitor) | | **Tramadol Tablets\*\*\*:**   * Generic – 50, 100 mg * Generic– 37.5/325 mg acetaminophen**❖**   **Extended Release:**   * ConZip and generic – 100, 200, 300 mg q 24 hrs   **Liquid:**   * Qdolo™ –5 mg/ml | | – – – | 300 mg |
| Text  Description automatically generated with low confidence  **Legend:**  **❖** See recommendations regarding  acetaminophen on previous page  \* Abuse Deterrent Opioid  \*\* Maximum dose 500 mg/24 hrs  \*\*\* Maximum dose 400 mg q 24 hrs;  age > 75 is 300 mg q 24 hrs;   avoid in seizure disorder    **Authors:**  Patrick Coyne, MSN, ACNS-BC, ACHPN, FAAN, FPCN  Constance Dahlin, MSN, ANP-BC, ACHPN, FAAN, FPCN  Judith Paice, PhD, RN, ACHPN, FAAN  **Published 2021 by:**  City of Hope/ Division of Nursing Research & Education  1500 E Duarte Road, Duarte, CA 91010 │Phone: 626.218.2346  [www.cityofhope.org/NRE](http://www.cityofhope.org/NRE)  [NRE@coh.org](mailto:NRE@coh.org) | | | | | |

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.

**Pain Assessment IN Advanced Dementia-PAINAD**

**A picture containing calendar

Description automatically generated**

**Quick Reference Guide for Symptom Management**

| **QUICK REFERENCE GUIDE FOR SYMPTOM MANAGEMENT** | |
| --- | --- |
| **SYMPTOM** | **TREATMENT** |
| **Fatigue** | * The most prevalent of symptoms reported in advanced disease * Rule out possible causative factors and evaluate which might be treatable given goals of care: anemia, iron deficiency, electrolyte imbalances, hypothyroidism, hypoxia, nutrition deficiencies, medications, anxiety/depression, sleep abnormalities * Exercise, physical therapy, occupational therapy * Assistive devices, caregiving support (hygiene, cleaning, meals) * Stimulants such as methylphenidate (Ritalin®) 2.5-5 mg PO QD or BID to start, then titrate prn * Dexamethasone (Decadron®) 2-8 mg PO QD, do not give in the evening * Mirtazapine (Remeron®) 15 mg PO QHS to enhance sleep, also improves appetite and mood |
| **Insomnia/ Sleep Disorders** | * Evaluate sleep patterns current and prior to diagnosis * Suggest sleep hygiene measures: reduce caffeine in afternoon/evening, do not watch TV/computer/cellphone/tablets in bed, limit alcohol intake, cool room, warm bath before bed * Relaxation therapy such as mindfulness exercises, meditation, guided imagery * For some, pharmacologic therapies ineffective if used daily * Zolpidem (Ambien®) 5-10 mg PO QHS; lower doses for women; safety concerns – sleep walking/eating * Mirtazapine (Remeron®) 15 mg PO QHS to enhance sleep, also improves appetite and mood * Buspirone (Buspar®) 5-20 mg PO TID * Trazodone (Desyrel®) 25-50 mg PO QHS * Avoid antihistamines (diphenhydramine) for sleeping aid, especially in elderly or frail |
| **Constipation**  **[Acute]** | * Assess frequency, volume, consistency and normal patterns of BMs * Diarrhea may be due to impaction; rectal exam indicated * Goal ≈ 3/week without straining, pain, tenesmus * Identify potential causative factors that can be addressed: opioids, anticholinergics, antihistamines, phenothiazines, tricyclic antidepressants, diuretics, iron, chemotherapy, ondansetron, antacids, dehydration, inactivity, hypercalcemia, hypokalemia, partial bowel obstruction, spinal cord compression, autonomic neuropathy, depression, anorexia, hypothyroidism * Encourage varied diet * First evacuate bowel – magnesium hydroxide (Milk of Magnesia) 30 mL PO QD, magnesium citrate 150-300 mL per day, bisacodyl 2-3 tabs PO QD or 10 mg suppository or Fleet’s Enema® (nothing per rectum if patient thrombocytopenic [< 50,000 platelets] or neutropenic [ANC < 500-1000]) – limit Fleet’s and other sodium phosphate agents in renal dysfunction; if these are ineffective, give: * Methylnaltrexone (Relistor*®*) SQ [for opioid induced constipation only] – dosing is weight based; contraindicated in obstruction * Naloxegol (Movantik®) 12.5 or 25 mg PO Q AM [for opioid induced constipation only] * Naldemedine (Symproic®) 0.2 mg PO QD [for opioid induced constipation for patients with chronic noncancer pain] |
| **Constipation**  [Ongoing Prevention] | * All patients on opioids should have an order for a bowel regimen * Add stimulant and softener combination (e.g., senna/docusate) and titrate to effect (max 8 tabs/day) * Increase with upward titration of opioid dose * If persistent, consider adding bisacodyl 2-3 tabs PO QD or 1 rectal suppository QD; lactulose 30-60 mL PO QD; metoclopramide (Reglan®) 10-20 mg PO QID; magnesium hydroxide (Milk of Magnesia) 30 mL PO QD * When constipation is related to opioids or in debilitated patient, changing the diet or adding fiber supplements is rarely helpful * Educate patients/families; there is much stigma about discussing bowel function   *Even when not eating, patients should have bowel movements every 1-2 days. Untreated constipation can lead to discomfort and increased pain, as well as agitation in the cognitively impaired patient.* |
| **Diarrhea** | * Evaluate for potential causes of diarrhea common in palliative care and correct/treat when feasible: medications (overuse of laxatives, antibiotics, magnesium, chemotherapy, immunotherapy), infection, diet, herbal products (e.g., milk thistle, cayenne, ginger) fecal impaction, malabsorption syndromes from surgery or tumor, radiotherapy that includes abdomen in treatment field, inflammatory bowel disease and other comorbid disorders * **Loperamide (Imodium®)** 2 mg PO –start with 4 mg, followed by 2 mg after each BM, not to exceed 8 capsules/24 hours * **Diphenoxylate/atropine (Lomotil®)** 1-2 tabs PO QID, maximum 8 per 24 hours * **Tincture of opium** – 0.6 mL PO q 4-6 hours prn * **Methylcellulose** **(e.g. Metamucil®)** or pectin can help provide bulk to liquid stools * **Octreotide (Sandostatin®)** 50 mcg SQ/IV q 8 hours, maximum 1500 mcg/day * **Cholestyramine** – 2-4 g PO/day before meals (especially for c. difficile diarrhea) * **Pancrelipase (Creon®, Pancreaze®)** 500 – 2500 lipase units/kg PO with meals |
| **Dyspnea [Shortness of breath; Air hunger]** | * Identify and treat reversible causes: airway obstruction (e.g., bronchodilators and/or corticosteroids), infection (e.g. antibiotics), CHF or fluid overload (e.g., diuretics), anxiety (e.g., anxiolytics) * Opioids are first line therapy; start with **morphine** 2.5-5 mg PO every hour (any opioid can be used) - titrate upward aggressively 25-50% if unrelieved * Liquids may be easier to swallow or can be placed sublingually [although absorbed enterally]: **morphine** liquid; **oxycodone** liquid * **Parenteral (IV or SQ) opioids -** can be used if patient unable to swallow * Add anxiolytics (benzodiazepines) only if anxiety is present [e.g., lorazepam every 4 hours as needed] or opioids fail to provide relief * Elevate head of bed [can use a fan for comfort]; pursed lip breathing * Consider oxygen only if patient is hypoxemic * Distraction, relaxation, mindfulness, create calm environment |
| **Anorexia** | * Educate and counsel patient/family regarding anorexia as a natural response to disease; interventions below only when loss of appetite bothersome to patient * Environmental alterations: small, frequent meals, moist foods or those with sauce/gravy take less energy to eat, assistance with meal preparation to improve energy for eating * **Dexamethasone** **(Decadron®)** 4 mg PO QD or prednisone 20 mg PO QD, especially when prognosis < 6 weeks * **Dronabinol (Marinol*®*)** 2-10 mg PO every 4 hours, use with caution in the older adult * **Mirtazapine (Remeron®)** 15 mg PO QHS to enhance sleep, also improves appetite |
| **Nausea & Vomiting**  ***Not intended to prevent or treat chemo -induced N&V*** | * + - Rule out potentially reversible causes: constipation, central nervous system disease, pain, altered electrolytes, ↑ICP, obstruction, antibiotics, chemotherapy, radiation therapy, opioids, digoxin   **If N & V due to activation of chemoreceptor trigger zone (CTZ) (e.g., medication-induced):**   * **Prochlorperazine (Compazine®)** 10 mg PO q 6 hours or 25 mg PR q 8 hours * **Haloperidol (Haldol®)** 0.5-4 mg PO or IV/SQ q 6 hours * **Ondansetron (Zofran®)** 4-8 mg PO or IV q 8 hours (best when used for chemo or RT induced N/V; less effective when treating opioid induced N&V) * **Olanzapine (Zyprexa*®*)** 2.5 – 10 mg PO QD - BID * **Promethazine (Phenergan®)**12.5 –25mg IV q 6 hours or 25 mg PO or PR q 6 hours   **If N & V due to gastric stasis causing early satiety, GI tract spasm:**   * **Metoclopramide (Reglan**®**)** 10-20 mg PO or IV TID AC & HS **[not with bowel obstruction]** * **Hyoscyamine (Levsin®)** 0.125-0.25 mg PO/SL q 4 hours prn   **If N & V due to vestibular effects (nausea exacerbated by movement):**   * **Scopolamine** transdermal patch 1.5 mg q 3 days (especially if underlying mechanism is vestibular - increased nausea or dizziness with ambulation) * **Cyclizine (Meclizine*®*)** 25-50 mg PO every 8 hours; best for motion sickness or increased intracranial pressure   **If mechanism of N *&* V is unclear, or unresponsive to other therapies:**   * **Dexamethasone** **(Decadron®)** 4-8 mg PO/IV daily * **Dronabinol (Marinol*®*)** 2-10 mg PO every 4 hours   ***Administer antiemetics around the clock (scheduled). If nausea is controlled, then try reducing after 2-3 days.*** |
| **Pain in the Final Hours of Life** | * Observe for escalating pain and increase medications accordingly * May need to change route if swallowing is diminished; alternatives include transdermal, concentrated liquids taken orally in small volumes, parenteral * Abruptly discontinuing opioids or benzodiazepines may precipitate withdrawal syndrome -reduce dose 25% daily if no sign of pain in comatose patient; return to previous dose if any sign of return of pain * Myoclonus may occur; treat with clonazepam (Klonopin®) 0.5 mg PO TID, MAX 20 mg/day or lorazepam (Ativan®) 0.5-2.0 mg PO/IV q 4 hours if patient unable to swallow; may require midazolam (Versed®); IV/SQ; rotate opioids |
| **Delirium & Agitation** | * Identify and treat reversible causes: full bladder, fecal impaction, pain, dyspnea (hypoxemia, secretions, pulmonary edema), severe anxiety, nausea, pruritus, medications (e.g., corticosteroids, neuroleptics, anticholinergics), dehydration, infection * Reduce noise, orient gently, reduce nighttime interruptions to promote sleep/wake cycle * **Haloperidol (Haldol®)** 0.5-2 mg PO every 2-4 hours PRN or IV/SQ 50% of oral dose   (may repeat q 1 hour PRN in severe delirium)   * **Olanzapine (Zyprexa®)** 2.5 – 5 mg PO QHS; to start, increase to 10 mg after one week * **Risperidone (Risperdal*®*)** 1-2 mg PO q PM, increase by 0.5-1 mg q 2-7 days * **Quetiapine (Seroquel*®*)** 12.5 – 25 mg PO q 12-24 hours; to start, increase up to 50 mg BID * **Chlorpromazine (Thorazine®)** 12.5-25 mg PO/SQ q 4-12 hours, or 25 mg per rectum q 4-12 hours (IV can cause hypotension-avoid unless other agents ineffective and oral/rectal route unavailable) * **Buspirone** 5-20 mg PO TID |
| **Excessive Secretions [“Death Rattle”]** | * **Atropine** 0.4 mg SQ q 15 minutes PRN * **Scopolamine** transdermal patch 1.5 mg topical, start with 1 mg (about 4 hour onset), increase to 2 mg after 24 hrs. If insufficient, begin scopolamine 50 mcg/hr IV or SQ; double every hour to maximum of 200 mcg/hr * **Glycopyrrolate (Robinul®)** 1-2 mg PO or 0.1 mg –0.2 mg IV/SQ q 4 hours PRN or 0.4-1.2 mg/day continuous IV/SQ infusion (this agent does not cross the blood brain barrier – less likely to cause confusion) * **Hyoscyamine (Levsin*®*)** 0.125 – 0.25 mg PO q 4 hours (liquid can be placed sublingually) * Change patient’s position * D/C IV and/or enteral fluids as they may increase discomfort (e.g., cough, pulmonary congestion, sensations of choking/drowning, vomiting, edema, pleural effusions, ascites) * If fluids not discontinued, IV or SQ rate ought not exceed 500 mL/24 hours * **Furosemide (Lasix®)** PRN to control over hydration. * Control thirst by moistening lips and mouth with substitute saliva (**Oral Balance Moisture Gel**® or **Salivart®,** at bedside apply as frequently as needed)   ***Patients may be too weak to expectorate. This is not painful, but distressing to family. Suctioning is traumatic, can cause bleeding and is painful. Do not suction beyond the oral cavity***. |
| **References (and for more details):**  **Ferrell, B., & Paice, J. (Eds). (2019). *Oxford textbook of palliative nursing*, 5th Edition. New York, NY: Oxford University Press.**  **Dahlin, C., Coyne, P., & Ferrell, B. (Eds). (2016). *Advanced practice palliative nursing.* New York, NY: Oxford University Press.**  **For additional resources, refer to:**  **City of Hope Nursing Research and Education Resources** [www.cityofhope.org/NRE](http://www.cityofhope.org/NRE); and  **ELNEC:** **End-of-Life Nursing Education Consortium** [www.aacnnursing.org/ELNEC](http://www.aacnnursing.org/ELNEC/Resources) | |

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.

**Ethical Principles**

|  |  |
| --- | --- |
| Autonomy | The duty to respect another’s personal liberty and individual values, beliefs and choices. A person with decisional capacity has the moral and legal right to determine what will be done with their own person. |
| Beneficence | The duty to do good and prevent or remove harm, and to treat patients in a way that provides maximum benefit to the patient. |
| Non-maleficence | The duty not to inflict harm or evil and to avoid causing clients unnecessary harm or pain. |
| Justice | The duty to treat equals equally and treat those who are unequal according to their needs. |
| Veracity | The duty to tell the truth and not to deceive others. |
| Fidelity | The duty to honor commitments. |
| Confidentiality | The duty not to disclose information shared in an intimate and trusted manner. |
| Privacy | The duty to respect for limited access to or information of a person. |

References:

Beauchamp T. L., & Childress J. F. (2019). *Principles of biomedical ethics*, 8th edition. New York, NY: Oxford

University Press.

National Consensus Project (NCP) for Quality Palliative Care. (2018). *Clinical practice guidelines for quality palliative care*, 4th edition. Richmond, VA: National Coalition for Hospice and Palliative Care. Accessed February 10, 2021 from: <https://www.nationalcoalitionhpc.org/ncp/>

Ong, W.Y, Yee, C.M, & Lee, A. (2012). Ethical dilemmas in the care of cancer patients near the end of life. *Singapore Medical Journal, 53*(1), 11-16.

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.

|  |
| --- |
| Cultural and Spiritual Considerations in End-of-Life Care |

**Brief Cultural Assessment: The CONFHER Model**

**C**= Communication

Does the client speak English?

Does the client understand common health terms, such as pain or fever?

What nonverbal communication is used?

**O**= Orientation

What are the client’s ethnic identity, values, orientation, and acculturation?

Do they identify with a specific group?

Where were they born?

How long have they lived here?

**N**= Nutrition

Food preferences and taboos. Food has meaning for most people and is a source of comfort. There may be some foods the person must avoid eating because they are taboo in their cultural group. *Consider addressing issues of artificial nutrition and hydration based on assessment findings.*

**F**= Family Relationships

Family structure is important…

How is family defined and who is in the family?

Who is the head of the household?

Who makes decisions in the family?

What is the role of women and children?

Is it important to have family present when someone is sick?

**H**= Health and health beliefs

Not all cultural groups subscribe to the germ theory of disease. Illness may be the result of evil spirits or something being out of balance.

What does the person do to stay healthy?

Who do they consult for health problems?

How do they explain illness?

**E**= Education

What is the person’s learning style and educational level?

How much formal education did the person complete?

What is their occupation?

**R**= Religion

What is that person’s preference?

Does the client have any religious beliefs or restrictions that have an impact on health care and illness?

Reference:

Fong, C. M (1985). Ethnicity and nursing practice. *Topics in Clinical Nursing, 7*(3), 1-10.

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*

**Spiritual Assessment: Mnemonics for Interviewing**

|  |  |  |
| --- | --- | --- |
| **Spiritual Assessment: Mnemonics for Interviewing** | | |
| **Author** | **Components (Mnemonic)** | **Illustrative Questions** |
|  |  |  |
| Maugens | **S** (spiritual belief system) | What is your formal religious affiliation? |
|  | **P** (personal spirituality) | Describe the beliefs and practices of your religion or spiritual system that you personally accept. What is the importance of your spirituality/religion in daily life? |
|  | **I** (integration with a spiritual community) | Do you belong to any spiritual or religious group or community? What importance does this group have to you? Does or could this group provide help in dealing with health issues? |
|  | **R** (ritualized practices and restrictions) | Are there specific elements of medical care that you forbid on the basis of religious/spiritual grounds? |
|  | **I** (implications for medical care) | What aspects of your religion/spirituality would you like me to keep in mind as I care for you? Are there any barriers to our relationship based on religious or spiritual issues? |
|  | **T** (terminal events planning) | As we plan for your care near the end of life, how does your faith impact on your decisions? |
|  |  |  |
| Anandarajah & Hight | **H** (sources of hope) | What or who is it that gives you hope? |
|  | **O** (organized religion) | Are you a part of an organized faith group? What does this group do for you as a person? |
|  | **P** (personal spirituality or spiritual practices) | What personal spiritual practices, like prayer or meditation, help you? |
|  | **E** (effects on medical care and/or end-of-life issues) | Do you have any beliefs that may affect how the healthcare team cares for you? |
|  |  |  |
| Puchalski | **F** (faith) | Do you have a faith belief? What is it that gives your life meaning? |
|  | **I** (importance or influence) | What importance does your faith have in your life? How does your faith belief influence your life? |
|  | **C** (community) | Are you a member of a faith community? How does this support you? |
|  | **A** (address) | How would you like for me to integrate or address these issues in your care? |

Adapted from: Taylor, E.J. (2019). Spiritual screening, history, and assessment. In B.R. Ferrell and J.A. Paice (Eds.), *Oxford textbook of palliative nursing*, 5th edition (Chapter 34). New York, NY: Oxford University Press. Reprinted with permission

**Spiritual Concerns or Diagnosis**

|  |  |  |
| --- | --- | --- |
| **Diagnoses (Primary)** | **Key Feature from History** | **Example Statements** |
| Existential concerns | Lack of meaning  Questions meaning about one’s own existence  Concern about afterlife  Questions the meaning of suffering  Seeks spiritual assistance | “My life is meaningless.”  “I feel useless.” |
| Abandonment by  God or others | Lack of love, loneliness  Not being remembered  No sense of relatedness | “God has abandoned me.”  “No one comes by anymore.”  “I am so alone.” |
| Anger at God  or others | Displaces anger toward religious representatives or others  Inability to forgive | “Why would God take my child…it’s not fair.” |
| Concerns about  relationship with  deity | Desires closeness to God, deepening relationship | “I want to have a deeper relationship with God.”  “I want to understand my spirituality more.” |
| Conflicted or  challenged belief  systems | Verbalizes inner conflicts or questions about beliefs of faith  Conflicts between religious beliefs and recommended treatments  Questions moral or ethical implications of therapeutic regimen  Expresses concern with life/death or belief system | “I am not sure if God is with me anymore.”  “I question all that I used to hold as meaningful.” |
| Despair/  hopelessness | Hopelessness about future health, life  Despair as absolute hopelessness  No hope for value of life | “Life is being cut short.”  “There is nothing left for me to live for.” |
| Grief/loss | The feeling and process associated with the loss of a person, health, relationship | “I miss my loved one so much.”  “I wish I could run again.” |
| Guilt/shame | Feeling that one has done something wrong or evil  Feeling that one is bad or evil | “I do not deserve to die pain free.” |
| Reconciliation | Need for forgiveness or reconciliation from self or others | “I need to be forgiven for what I did.”  “I would like my wife to forgive me.” |
| Isolation | Separated from religious community or other community | “Since moving to the assisted living, I am not able to go to my church anymore.”  “I have moved and no longer can go to my usual 12-step meeting.” |
| Religious specific | Ritual needs  Unable to perform usual religious practices | “I just can’t pray anymore.” |
| Religious/  spiritual struggle | Loss of faith or meaning  Religious or spiritual beliefs or community not helping with coping | “What if all that I believe is not true?” |

**Accessed with permission from:** GWish, 2600 Virginia Ave, NW, Suite 300, Washington, DC 20037; 202-994-6220; [www.gwish.org](http://www.gwish.org)

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.

**LGBTQI Resources**

|  |  |
| --- | --- |
| **RESOURCE** | **WEBSITE** |
|  |  |
| **Center of Excellence for Transgender Health** | <https://prevention.ucsf.edu/transhealth> |
|  |  |
| **Hospice Foundation of America LGBT Resources** | <https://hospicefoundation.org/End-of-Life-Support-and-Resources/Coping-with-Terminal-Illness/How-to-Choose/LGBT-Resources> |
|  |  |
| **Lambda Legal Tools for Life and Financial Planning** | <http://www.lambdalegal.org/publications/take-the-power> |
|  |  |
| **LGBT Best and Promising Practices for Cancer Care for LGBT Patients and Families Throughout the Cancer Continuum** | <http://www.lgbthealthlink.org/Cancer-Best-Practices> |
|  |  |
| **LGBT Hospice and Palliative Care Network** | <https://lgbthpm.org/resources/> |
|  |  |
| **National Resources Center on LGBT Aging** | <http://LGBTagingcenter.org/resources> |
|  |  |
| **Services and Advocacy for Gay, Lesbian, Bisexual & Transgender Elders** | <http://sageusa.care/> |
|  |  |
| **Project Implicit, The Implicit Association Test (IAT): measures attitudes and beliefs that people may be unwilling or unable to report** | <https://implicit.harvard.edu/implicit/education.html> |
|  |  |
| **Defining Terms: LGBTQIA Resource Center, University of California Davis** | <https://lgbtqia.ucdavis.edu/educated/glossary> |
|  |  |
| **Free Online Resource for Learning More about Gender, Sexuality, & Social Justice by Sam Killerman** | <https://www.itspronouncedmetrosexual.com> |

*All websites last accessed February 13, 2021*

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*

Self-Care Strategies for Nurses

The goal of this session is to increase awareness of the impact of chronic stress on health care professionals and to give a brief overview of interventions or self care behaviors that can reduce stress. Much of the following information and exercises are taken from *Self Care Strategies for Healthcare Professionals* section of The Nursing Wellness Program developed in the Department of Nursing Research and Education, City of Hope, Duarte, CA*.*

Nursing care of geriatric patients and patients at the end-of-life can be complex and requires nurses to use professional interventions and personal coping strategies in order to be effective. Professional self-care is a skills set that can be learned, and is just as important as all other nursing skills sets. This exercise is to assist nurses to think about personal coping strategies that support a healthy life style and to offer education on self care to fellow nurses and staff such as nursing assistants and others.

## *“When we attend to ourselves with compassion and*

## *mercy, more healing is made available for others.”*

## *--Wayne Muller*

## Significance of Self-Care

Nurses are excellent at nurturing their patients and taking care of others. Even when nurses are experiencing burnout symptoms, they do not lose empathy for their patients (Kash, et. al., 2000). Recently, the term “compassion fatigue” has been used (Figley, 2012) to describe physical, spiritual, and emotional exhaustion in healthcare and others such as firemen, rescue workers, and other deeply caring individuals. However, nurses are not always as good at nurturing themselves, and can become physically and emotionally exhausted. Nurses often deal with stressors in the work environment at the expense of their own health. For example, there is a high frequency of smoking among nurses and nurses are at risk for obesity. Nurses are also at risk for low back pain, depression, suicide, alcohol and drug abuse (Sarna et al., 2005).

It is ideal to have nurses and others practice healthy, ongoing self-care while successfully continuing to care for others. Self care that leads healing begins by employing such simple practices as regular exercise, healthy eating habits, enjoyable social activities, journaling, and restful sleep. You can find more information at <http://www.compassionfatigue.org/> [Accessed February 10, 2021].

**Stressors and Nurses:**

Nursing practice exposes the nurse to many different stressors. French et al. (2000) identified 9 workplace stressors that seem to affect nurses. These include:

* Conflict with physicians
* Inadequate preparation
* Problems with peers
* Difficulty with supervisors
* Discrimination, workload
* Uncertainty concerning treatment
* Dealing with death and dying
* Patients and their families

These potential stressors exist within the workplace and do not begin to describe the stressors that may exist for an individual outside the workplace and in the home.

The consequences of prolonged and/or unmitigated stress include the development of burnout, deterioration in over all health as well as the use of coping mechanisms destructive to the individual (i.e., smoking and overeating).

The nursing profession attracts individuals who are interested in caring for others and helping people in times of great stress. Nurses find themselves attached to patients and, when those patients become terminally ill, often find it difficult to manage the physical and emotional impact. These physical and emotional consequences can lead to compassion fatigue or burnout (Kash et.al., 2000). Nurses frequently deal with this stress at the expense of their own health, as illustrated by the frequency of smoking found in the working nursing population (Sarna, 2005). Nothing in the usual curriculum in nursing schools or orientation programs in hospitals is directed toward helping nurse’s deal with job-related stress.

Burnout is described as a state of profound physical, emotional, and mental exhaustion. There are three principle symptoms of burnout identified by Maslach and colleagues (2009). They are emotional exhaustion, depersonalization and decreased feelings of personal accomplishment.

The literature suggests that programs that use the personal approach to wellness may be more successful than those that attempt to modify environmental factors (Kash et al., 2000). By facilitating the individual’s preparation of a wellness strategy, the impact of stressful professional circumstances can be mitigated.

## Proactive Choices for Well Being

It is important to identify your own wellness strategies and think about how to maximize your well being to prevent the debilitating effects of chronic stress. Chronic stress leads to burnout, which includes physical and emotional exhaustion, decreased empathy, decreased sense of accomplishment and staff turnover (Kash et al., 2000). Waiting until you are already on the verge of burnout can lead to health problems, resignation, or disability. High stress leading to burnout is also contributes to staff turnover.

**Interventions Daily Stress Diary:**

Self-monitoring helps change behavior. Awareness, which is increased with self-monitoring, leads to change and growth. Keeping a “stress diary” can help with self-monitoring and planning for changes to promote self-care.

**Stress Diary**

Keeping a stress diary for a week or two can help you identify the types of situations that are stressful for you and your responses to them. You may identify a pattern of behavior that you want to change.

Example:

|  |  |  |
| --- | --- | --- |
| **Time** | **Stressful Event** | **Symptoms** |
| 8:30 | Rushing, late to work | frustrated |
| 9:30 | Change in schedule | mild headache |
| 11:00 | Difficult patient | anger; neck tense |
| 3:00 | Traffic; accident on freeway | moderate headache |
| 6:00 | neck & shoulder pain | anger |
| 7:00 | Child not doing homework | frustration, depressed |

## Daily Stress Response Diary

Fill in the stress diary below for one week. Complete one row for each stressful situation you experience daily. You may want to make copies of this form for additional diary entries.

NOTE: The Root Cause column may be somewhat difficult at first. This piece of data is to capture your learning history that contributes to the current situation. For example, if you are feeling anxious talking to your boss (the stressor), the root cause of this anxiety may be anxious feelings you have had in the past with authority figures such as a parent or teacher. If you can’t think of a root cause, skip this column and go on to complete the rest of the worksheet. You can always go back and fill this in if you have an insight.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date | Symptom of the Stress**(How it was felt in your body)** | Stressor (Cause or  Situation) | **Root cause** (Underlying  Reason) | Action (What you did to make the situation better) | **Past Behavior** (What did you do in the past?) | Options (What will you do differently in the future?) |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Girdano, D.A., Dusek, D.E., & Everly, G.S. (2013). *Controlling stress and tension*, 9th edition. Boston, MA: Benjamin Cummings.

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.

## The Wellness Plan

Learning about your unique stress patterns can help you create a **plan of care**. This care plan – your wellness plan – is a **living document** that will change as you change. It is a **tool** that you will modify as you learn what works and doesn’t work for you over time.

Start thinking today about how you can create a personalized wellness plan that you can adhere to over time. Applying your strategies **consistently** is key to preventing stress overload and resulting burnout. Now is the time to make a firm commitment to take good care of you!

You might think about how you answered your self-care history form. What has worked for you in the past? Wellness strategies can include:

* Exercise/sports
* Deep breathing and relaxation skills
* Art therapy techniques
* Classical music
* Social support
* Meditation/prayer
* Hobbies
* Humor
* Positive self-talk and reframing
* Church and community activities
* Family fun time
* Learning something new of interest
* Massage
* Yoga
* Playing with children/pet

It is helpful to think of strategies that will work for you in these **5 domains**:

###### The Five Domains of Wellness

* Physical (e.g., walking, swimming, dancing)
* Mental (e.g., learning something new; positive self-talk)
* Emotional (e.g., expressing feelings through art or journal)
* Social (e.g., connecting with family, friends regularly)
* Spiritual (e.g., prayer/meditation; being in nature)

On the next page is a poem about self-care. You are invited to read this poem, and then write a self-reflection on how the poem applies to you.

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.

References:

Figley, C. (2012). *Helping traumatized families*, 2nd edition. New York, NY:Brummer-Routledge.

Figley, C. (1998). *Burnout in families: the systemic costs of caring*. Boca Raton, FL: CRC Press LLC.

French, S.E., Lenton, R., Walters, V., & Eyles, J. (2000). An empirical evaluation of an expanded Nursing Stress Scale. *Journal of Nursing Measurements, 8*(2), 161-178.

Girdano, D.A., Dusek, D.E., & Everly, G.S. (2013). *Controlling stress and tension,* 9th edition. Boston, MA: Benjamin Cummings.

Kash, K.M., Holland, J.C., Breitbart, W., Berenson, S., Dougherty, J., Ouellette-Kobasa, S. et al. (2000). Stress and burnout in oncology. *Oncology (Williston Park), 14*(11), 1621-1633; discussion 1633-1624, 1636-1627.

Maslach, C., Leitner, M.P., & Schaufeli, W.B. (2009). Measuring burnout. In C.L. Cooper, & S. Cartwright (Eds). *The oxford handbook of organizational well-being* (pp 86-108). Oxford, UK: Oxford University Press.

Sarna, L., Bialous, S.A., Wewers, M.E., Froelicher, E.S., & Danao, L. (2005). Nurses, smoking, and the workplace. *Research in Nursing & Health, 28*(1), 79-90.

**Grace**

Give me the **grace**

To care

Without neglecting my needs,

The **humility**

To assist

Without rescuing,

The **kindness**

#### **To be clear**

Without being cold,

#### **The** mercy

To be angry

Without rejecting,

The **prudence**

To disclose

Without disrespecting my privacy,

#### **The** humor

#### **To admit human failings**

Without experiencing shame,

The **compassion**

To give freely

**Without giving myself away**

--Source unknown

**Self-Care Exercises to use with the poem, *Grace*:**

**Written Self-Reflection Exercise:**

After reading the poem *“Grace”* write about the parts of the poem that apply to you.

*OR*

## Art Reflection Exercise:

Using any media of your choice, create an art reflection that expresses your response/emotions to the poem *“Grace.”*

**Remember these KEYS TO SUCCESS:**

* Self-monitoring creates awareness. Awareness plus a plan of action leads to behavior change.
* The *Wellness Plan* is a living document that will change as you learn about yourself.
* The *Five Domains of Wellness* is a key feature of the *Wellness Plan* to help you create a balanced approach to wellness.
* Journaling (written reflections) and art reflections are both excellent ways to help you gain insight into your needs.

This resource “Self-Care Strategies for Nurses” was adapted from City of Hope, *Self Care Strategies for Healthcare Professionals,* Department of Nursing Research and Education, Kate Kravits, RN MA, Principal Investigator. Supported by a grant from the UniHealth Foundation.

*The End-of-Life Nursing Education Consortium (ELNEC) Project is a national and international end-of-life/palliative care educational program administered by City of Hope (COH) designed to enhance palliative care in nursing. Materials are copyrighted by City of Hope and the American Association of Colleges of Nursing (AACN) and are used with permission*.