CHAPTER 3

Vulnerable Populations

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Section One: Overview of Vulnerabilities and Disparities

Healthcare disparities generally refers to differences in the quality of health care across individuals or groups in regard to access, treatment options, and preventative services. Vulnerability as a concept originated from a variety of disciplines including economics, sociology, anthropology, and environmental science. Segments of the global population experience social inequalities and are at risk for poor health outcomes. Nurse practitioners (NPs) are keenly aware that any individual can become vulnerable at any point in their life; however, it is well documented in the literature that health outcomes and vulnerability fall along a social gradient and that poorer people experience poorer health (Grabovschi, Loignon, & Fortin, 2013; Marmot, 2005). This global phenomenon is seen in low-, middle-, and high-income countries. The World Health Organization (WHO) has been bringing to the forefront a sense of urgency for healthcare leaders to address health inequities across the globe. Health inequities or disparities refers to systematic gaps in health outcomes between different groups of people that are judged to be avoidable and therefore are considered unfair and unjust. It is the inherent human right to primary, secondary, and tertiary medical care, food, housing, and other resources. Primary care nurse practitioners with a strong educational base have a longstanding commitment to cultural competence and social justice. As integral members of the healthcare delivery team, NPs are well positioned for leadership roles in addressing the gaps in health prevention and treatment the rehighlight certain groups as vulnerable populations and attempt to build an understanding of the needs within the various groups.

Social Determinants of Health

The social determinants of health (SDH) are the conditions in which people are born, grow, work, live, and age (Healthy People, 2020). There are four well-established factors

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that influence individual and aggregate health outcomes including but not limited to (1) lifestyle and behaviors, (2) genetic factors, (3) social and environmental forces, and (4) medical care. For a brief representation see **TABLE 3-1**. Primary care clinicians must be astute at assessing all of these factors whether seeing a patient at point of care or assessing community needs and developing responsive programs for the particular population in which they serve.

Despite significant medical advances in this country, poor and nonwhite ethnic minorities are ranked lower in health status on numerous measures. According to the Centers for Disease Control and Prevention (CDC), morbidity and mortality rates remain higher for African-Americans who continue to die disproportionally more than whites from chronic disease (CDC, 2017). Reasons for the lower health status ranking may include genetic and gender differences, stereotyping, perceived discrimination, and mistrust of healthcare providers. Language barriers, ineffective use of translators, and lack of cultural humility can influence the nurse practitioner's ability to properly diagnosis and treat patients.

Literacy and Advocacy

Health literacy is a concept grounded in the literature on health promotion and education. Health literacy can be defined as the degree to which individuals have the cognitive and social capacity to access, process, and utilize basic health information and services to maintain good health, make appropriate health decisions, and meet their goals. According to the National Assessment of Adult Literacy, only 12% of adults have proficient health literacy and 14% have below basic health literacy, with 42% reporting health is poor (Kutner, Greenberg, Jin, & Paulsen, 2006). Low literacy has been linked with being underinsured and having poor health outcomes, higher rates of hospitalization, and less frequent use of preventive services. Populations most likely to experience low health literacy are older adults, racial and ethnic minority

TABLE 3-1 Social Determinants of Health

Life Style	Social/ Environmental	Genetic	Medical Care
■ Diet ■ Food ■ Exercise ■ Tobacco use ■ Illicit drug use ■ Unsafe sex ■ Irresponsible motor vehicle use	■ Education ■ Employment ■ Socioeconomic status ■ Food insecurity ■ Social cohesion ■ Quality of housing ■ Crime and violence ■ Discrimination ■ Environmental conditions	■ Predisposed to certain diseases ■ Inherited diseases	■ Access to preventative measures ■ Access to curative measures ■ Health literacy ■ New technology ■ Clinical trials

groups, individuals with low educational levels, those living below the poverty level, and non-native speakers of English (U.S. Department of Health and Human Services [USDHHS], 2017). Individuals with low literacy will find it difficult to navigate the healthcare system, provide accurate health histories, fill out complex forms, and engage in self-care and chronic disease management. According to research studies, persons with limited health literacy skills are less likely to receive preventive measures such as mammograms, Pap smears, colonoscopies, and vaccines when compared to those with adequate health literacy skills. Studies have shown that patients with limited health literacy skills enter the healthcare system when they are sicker, which impacts healthcare utilization and cost (USDHHS, 2017).

Advocacy

With advanced education and extensive experience caring for patients and their families, nurse practitioners are equipped to serve as advocates by providing a voice for patients, communities, and the healthcare profession at large. An advocate is defined as an individual or group that pleads, defends, or supports a cause or interest of another. Much of the literature on advocacy comes from nonprofit and special-interest groups that prepare potential advocates to influence public policy. Advocates are often thought of as individuals who lead change through influence and help decision makers work through solutions to problems. At the macrosystem level, advocacy often requires working through formal decision-making bodies to achieve desired goals and outcomes. This process could include working through the "chain of command" within a healthcare organization, state legislature, or other groups at the healthcare system's policy level (Basch, 2014). Ensuring that every individual has access to the health care they need is of paramount importance. Advocacy for social justice and human rights protection for populations who are powerless and dependent on others to address their complex vulnerabilities is a challenge at best. Patients and families often find themselves overwhelmed and lacking the essential information they need to make informed choices. Such vulnerability is cited as a key reason for advocacy at the point of care. At the microsystem level, nurse practitioners must become motivated to act on another's behalf, gain insight into one's self and others, develop cultural skills, and actively engage with diverse groups to promote effectiveness of care (Pacquiao, 2008).

Poverty, Vulnerability, and Resilience

The single, most important determinant of social injustices is poverty and the social and environmental factors that coexist with it. Poverty is a widely recognized global issue and a major determinant of poor health; and this association has been extensively studied and verified. It is a growing problem in the United States and in other developed nations as well as a continuing and devastating problem in the least developed countries (Conway, 2016). The cycle of poverty is more than a socioeconomic issue. It impacts health, well-being, and quality of life for generations to come. Factors that coexist with poverty include poor housing; inadequate nutrition; lack of clean water; increased exposure to violence; fragmented health care; and a higher prevalence of physical illness, mental health issues, and disabilities (Basch, 2014). Despite these well-established linkages, little work has been done to determine what family nurse practitioners can do to address poverty status at point of care and be stewards of sustainable change. For purposes of this chapter, we will consider poverty in the United

States given the steady influx of immigrants and the projected tipping point at 2040, where minorities will become the numerical majority.

Definition of Poverty

The U.S. Census Bureau uses a set of monetary income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered as living in poverty. As defined by the federal government, those who make less than the official poverty threshold earn less than $24,000 annually for a family of four. In 2015, 43.1 million people lived in poverty in the United States at a rate of 13.5%. Poverty impacts certain groups disproportionately; single-parent families, women, children, seniors, and the disabled experience greater rates of poverty (Proctor, Semegaand, & Kollar, 2015).

Ethnic Groups and Poverty

Certain ethnic and population groups also face greater challenges than the general population in terms of economic advantage. According to 2015 U.S. census data, the highest poverty prevalence by race is among African-Americans (24.1%), with Hispanics (of any race) having the second-highest poverty rate (21.4%). Whites had a poverty rate of 9%, and Asians 11.4% (Proctor et al., 2015).

Women and Children Living in Poverty

Poverty does not strike all demographics equally. For example, in 2015, 12.2% of men lived in poverty, and 14.8% of women lived in poverty. Along the same lines, the poverty rate for married couples in 2014 was only 5.4%, but the poverty rate for single-parent families with no wife present was up to 14.9%, and for single-parent families with no husband present 28.2% (Proctor et al., 2015).

According to the National Center for Children in Poverty (NCCP) approximately 15 million children in the United States, or 21% of all children, live in families with incomes below the federal poverty threshold, a measurement that has been shown to underestimate the needs of families (NCCP, 2016). On average, families need an income of about twice that level to cover basic expenses. Using this standard, 43% of children live in low-income families. Children living in poverty are more likely to experience hunger, which has secondary effects of lower reading and math scores, more physical and mental health problems, more emotional and behavioral problems, and a greater chance of obesity (Yang, Granja, & Koball, 2017).

Elderly and Poverty

While poverty was once far more prevalent among the elderly than among other age groups, today's elderly have a poverty rate similar to that of working-age adults and much lower than that of children. For people aged 65 and older, the 2015 poverty rate declined to 8.8% from 10% in 2014, while the number in poverty declined to 4.2 million, down from 4.6 million (Proctor et al., 2015). Social security income is often mentioned as a likely contributor to the decline in elderly poverty; however,

increases in the life expectancy of the elderly over time mean that financial resources have to last longer. At the same time, healthcare and housing costs are on the rise and employer benefit pension plans have decreased. This means seniors face significant insecurity about whether or not their resources are sufficient to cover the duration of their lives after retirement (Borrowman, 2012). In addition, it is well-known that poverty rates among Hispanics and African-Americans ages 65 and older are below the threshold when compared to white adults in this age group (Cubanski, Casillas, & Damico, 2015).

Vulnerability and Resilience

Resilience may be an approach to understanding the vulnerability of families and the community in which the nurse practitioner serves. Resilient communities promote or encourage diversity, flexibility, inclusion, and participation among its members. At a systems level, recognition of social values, accepting uncertainty and change, and fostering an educational environment are approaches that facilitate the building of social capacity (deChesney & Anderson, 2016). Understanding the social capacity of a community will help the nurse practitioner identify important differences within communities in terms of access to resources and entitlements for the poor. Individuals with few financial assets may be less resilient, meaning less adaptive to withstanding adversities in terms of poor housing and lack of adequate food, clothing, education, and medical care. Families with low incomes are generally viewed as households with substantial problems putting themselves at risk for homelessness, exposure to violence, school failure, and social deprivation. Helping families assess their strengths in terms of economic resources, problem-solving capabilities, family cohesion, communication, and social support will make them less risk adverse (Orthner, 2004). As individuals and families living in poverty build their resilience and adaptive capacities, positive consequences may be realized in terms of maintaining school attendance, avoidance of violence and crimes, engagement in developmentally appropriate activities, and maintaining stable housing.

Section Two: Overview of Select Special Populations, Direct Care, and Access

Adverse Childhood Events

A large epidemiological research study founded by collaborative researchers from the Centers for Disease Control (CDC) and Kaiser Permanente examined the relationship between adverse childhood experiences (ACEs) and adult health issues in over 17,000 patient members (CDC, 2016). Childhood experiences that have been examined include emotional abuse, physical abuse, sexual abuse, violence against the respondent's mother, living with substance abusing household members, living with mentally ill or suicidal household members, and living with household members who have been imprisoned (CDC, 2016). Results have demonstrated that exposure to one ACE is likely to increase exposure to other ACEs as well as positively correlate to a large variety of adult illnesses. Adult disease associated with

ACEs include cancer, autoimmune conditions, heart disease, chronic obstructive pulmonary disease, alcoholism, depression, and high-risk behaviors (CDC, 2016). Researchers suggest that high-risk behaviors may well be coping strategies used to manage stress associated with surviving ACEs. In the mental health chapter of this book there is a discussion on the effect of ACEs on the neurocognitive development of children. The ACEs Pyramid, in **FIGURE 3-1,** can be used as a tool for NPs to use in understanding risk factors that may lead to increased morbidity and mortality later in life.

Nurse practitioners have a unique approach to patients and families and stress both care and cure. Nurse practitioners are in an ideal position to increase the practice of assessing and screening for patients who are survivors of ACEs, and encouraging those who are appropriate for therapy to mental health services. **BOX 3-1** provides a sample questionnaire that covers topics from the original ACEs; however, research has uncovered that bullying and witnessing violence in the community are just as or perhaps more stressful. Therefore, the NP may prefer to ask the patient about general issues as they relate to the patient's childhood, such as:

- How well do you remember your childhood?
- Are there things that happened to you when you were a child that shouldn't have happened to you or anyone?
- Would you like your children to grow up as you did?
- Sometimes we feel guilty about things that happened to us in the past. Are you feeling any sense of guilt or shame? (Clarke, Schulman, McCollum, & Felitti, 2015)

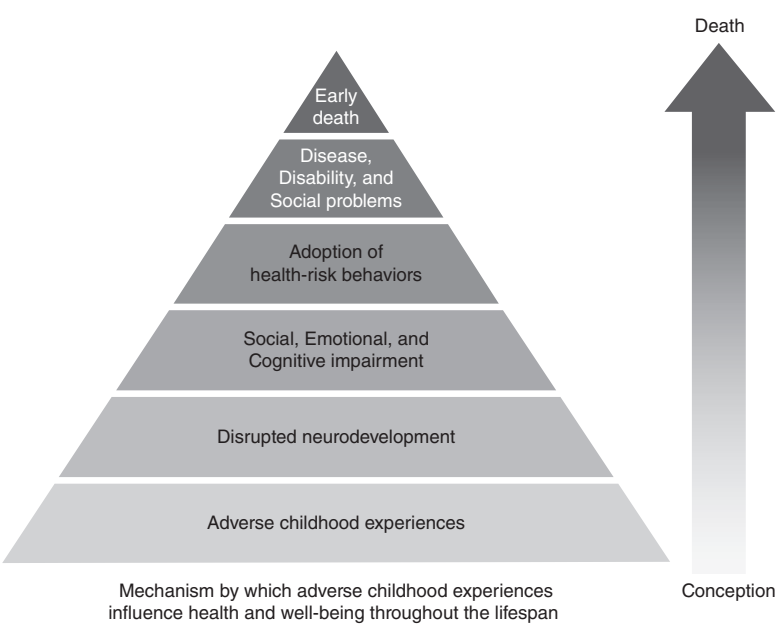


FIGURE 3-1 ACEs Pyramid.

Reproduced from CDC. (2016). About the CDC-Kaiser ACE study. Retrieved from https://www.cdc.gov/violenceprevention/acestudy/about.html

BOX 3-1 BRFSS Adverse Childhood Experience (ACE) Module Prologue: (CDC, 2016)

I'd like to ask you some questions about events that happened during your childhood. This information will allow us to better understand problems that may occur early in life, and may help others in the future. This is a sensitive topic and some people may feel uncomfortable with these questions. At the end of this section, I will give you a phone number for an organization that can provide information and referral for these issues. Please keep in mind that you can ask me to skip any question you do not want to answer. All questions refer to the time period before you were 18 years of age. Now, looking back before you were 18 years of age:

1. Did you live with anyone who was depressed, mentally ill, or suicidal?
2. Did you live with anyone who was a problem drinker or alcoholic?
3. Did you live with anyone who used illegal street drugs or who abused prescription medications?
4. Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
5. Were your parents separated or divorced?
6. How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?
7. Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. Would you say?
8. How often did a parent or adult in your home ever swear at you, insult you, or put you down?
9. How often did anyone at least 5 years older than you or an adult, ever touch you sexually?
10. How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually?
11. How often did anyone at least 5 years older than you or an adult, force you to have sex?

RESPONSE OPTIONS:

Questions 1–4:	1=Yes	2=No	7=DK/NS	9=Refused
Question 5:	1=Yes	2=No	8=Parents not married	7=DK/NS
	9=Refused			
Questions 6–11:	1=Never	2=Once	3=More than once	7=DK/NS
	9=Refused			

Free access to review and use survey questionnaires about health and family history are available on the CDC website at https://www.cdc.gov/violenceprevention/acestudy/about.html.

Reproduced from CDC. (n.d.). BRFSS Adverse Childhood Experience (ACE) Module. Retrieved from https://www.cdc.gov/violenceprevention/acestudy/pdf/brfss_adverse_module.pdf

Transgenerational Trauma

Transgenerational or intergenerational trauma is a wounding from a traumatic event that has effects upon generations after the initial trauma. This type of trauma can occur in individual families, or groups who have experienced genocide, terrorism, natural disasters, etc., as collective trauma. In either case, there can be long-lasting harmful effects on physiological processes in the body, which can cause chronic disease.

An example of this can be found in the Native American population, which suffers from some of the highest health disparities in the United States. The median age of death in South Dakota Native Americans is 58 compared to whites, where 81 years of age is the median (Warne & Lajimodiere, 2015). Native Americans have experienced centuries of inequities adding to the root causes for these poor health disparities. From the 15th to the 19th century, millions of Native Americans died from warfare and infectious diseases, including smallpox which was intentionally spread to the indigenous people by giving them blankets that had been used by smallpox patients (Warne & Lajimodiere, 2015). In the late 1890s up to the 1930s, there were multitudes of off-reservation boarding schools developed to destroy the Native American culture by teaching the children reading, writing, and arithmetic and keeping them away from their parents and tribal culture and customs. Children from ages 4 and up were taken and sent away to boarding schools—their parents often having no choice. These children were exposed to all forms of abuse, homesickness, infectious diseases, lack of love and parenting, and loss of tradition and culture identity, resulting in the deaths of many of these children. Those who survived lack the skills and knowledge to parent, have not been able to heal, and therefore suffer from alcoholism, substance abuse, poverty, depression, and the like. Homicides, suicides, and interpersonal violence injuries beset this population. The trauma has been passed down to the next generation.

Homeless Health Care

According to the National Alliance to End Homelessness, the annual Housing and Urban Development (HUD) point-in-time count identified 564,708 people experiencing homelessness in 2015. Though the vast majority of the homeless population lived in some form of shelter or in transitional housing at the time of the point-in-time count, approximately one-third lived in a place not meant for human habitation, such as the street or an abandoned building. Subpopulations experiencing homelessness are individuals, which accounts for more than half of the homeless; families are the second largest subgroup. Other subgroups are those individuals who were chronically homeless, chronically homeless families, veterans, and unaccompanied youth and children. Although most homeless persons live in urban areas, a surprising 16.1% live in rural areas where they sleep in the woods, campgrounds, cars, and abandoned farm buildings.

Defining Homelessness

According to the National Health Care for the Homeless Council (NHCHC, 2017) there is more than one "official" definition of homelessness. Health centers funded by the USDHHS use the following definition:

> A homeless individual is defined in section 330(h)(5)(A) as "an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is a resident in transitional housing." (NHCHC, 2017)

The Federal Bureau of Primary Health Care expands the definition of homelessness to include the following: an individual may be considered to be homeless if that person is "doubled up," a term that refers to a situation where individuals are unable to maintain their housing situation and are forced to stay with a series of friends and/or extended

BOX 3-2 Assessing for Homelessness at Point of Care

- Patient self-defines as homeless.
- Patient lives place to place.
- Patient lives with family or friends because there is no other option.
- Patient is staying in a place that restricts number of nights (including pays rent by hours, days, or weeks).
- Patient lives in overcrowded situation.
- Patient lives in housing that is based on illegal/unwanted acts (e.g., prostitution).
- Patient is separated from family members because of limited housing choice.

family members. In addition, previously homeless individuals who are to be released from a prison or a hospital may be considered homeless if they do not have a stable housing situation to which they can return. A recognition of the instability of an individual's living arrangements is critical to the definition of homelessness (HRSA, 1999; NHCHC, 2017).

Programs funded by the U.S. Department of Housing and Urban Development (HUD) use a different, more limited definition of homelessness that is restricted to individuals living on the streets or in shelters. Advocates of homeless states that HUD needs to expand its definition to allow communities flexibility in providing cost-effective housing and support services to this currently underserved group.

Clinical Practice Guidelines

With the start of the new millennium a group of clinicians from the National Health Care for the Homeless Council in collaboration with the Agency for Health Care Quality and Research (AHCQR) began to adapt clinical practice guidelines for patients who are considered homeless. In 2004, the National Guidelines Clearinghouse placed NHCHC-published guidelines for specific disease processes and general care of the homeless (NHCHC, 2017). There are now nine specific clinical guidelines as well as a standard clinical practice guideline to address the special challenges faced by homeless patients that may limit their ability to adhere to a plan of care (see **BOX 3-3** and **TABLE 3-2**). In addition, the NHCHC website provides information on diseases and

BOX 3-3 National Health Care for the Homeless Council Adapted Clinical Guidelines: 10 Areas of Focus

Asthma
Cardiovascular Diseases: Hypertension, Hyperlipidemia, and Heart Failure
Chlamydial or Gonococcal Infections
Chronic Pain
Diabetes Mellitus
General Recommendations for the Care of Homeless Patients
HIV/AIDS
Opioid Use Disorder
Otitis Media
Reproductive Health Care

Reproduced from NHCHC. (2017). Adapted Clinical Guidelines. Retrieved from https://www.nhchc.org/resources/clinical/adapted-clinical-guidelines/

TABLE 3-2 Health Care for Homeless Patients: Summary of Recommendations

History

- Living situation
- Prior homelessness
- Acute/chronic illness history
- Medications
- Mental illness/cognitive deficit
- Developmental/behavioral problems
- Alcohol/nicotine/other drug use
- Health insurance and other assistance
- Sexual history—gender identity, sexual orientation, behaviors, partners, pregnancies, hepatitis/HIV/other STIs
- History and current risk of
- Legal problems/violence
- Work history—longest time held a job, veteran status, occupational injuries/toxic exposures
- Education level
- Nutrition/hydration—diet, food resources, preparation skills, liquid intake
- Cultural heritage/affiliations/supports
- Strengths—coping skills, resourcefulness, abilities, interests

Physical examination

- Comprehensive exam—at first encounter if possible
- Serial, focused exams—for patients uncomfortable with full-body, unclothed exam at first visit
- Special populations—victims of abuse, sexual minorities
- Dental assessment—age-appropriate teeth, obvious caries, dental/referred pain, diabetes patients

Education, self-management

- Protection from communicable diseases, risk of delayed/interrupted treatment
- Behavioral change—individual/small group/community interventions, motivational interviewing
- Education of shelter/clinical staff—regarding special problems/needs of homeless people

Diagnostic tests and screening

- Baseline labs, including EKG, lipid panel, potassium and creatinine levels, HbA1c, LFTs
- Asthma—spirometry or peak flow monitoring
- TB screening for patients living in shelters and others at risk for tuberculosis
- STI screening—for chlamydia, gonorrhea, syphilis, HIV, HBV, HCV, and trichomonas
- Mental health—Patient Health Questionnaire (PHQ-9, PHQ-2), MHS-III, MDQ
- Substance abuse—SSI-AOD
- Cognitive assessment—Mini-Mental Status Examination (MMSE)
- Developmental assessment
- Interpersonal violence—Posttraumatic Diagnostic Scale
- Forensic evaluation—if strong evidence of child abuse
- Healthcare maintenance—cancer screening for adults, EPSDT for children

TABLE 3-2 Health Care for Homeless Patients: Summary of Recommendations

Medications
- Simple regimen—low pill count, once-daily dosing where possible
- Storage/access—in clinic/shelters; if no access to refrigeration, don't prescribe meds that require it.
- Patient assistance—entitlement assistance, free/low-cost drugs if readily available for continued use
- Aids to adherence—harm reduction, outreach/case management, directly observed therapy

Follow-up/Outreach and Engagement
- Contact information—phone, email for patient/friend/family/case manager
- Medical home—to coordinate/promote continuity of health care
- Frequent follow-up, incentives, nonjudgmental care regardless of adherence
- Drop-in system—Anticipate/accommodate unscheduled clinic visits
- Transportation assistance—provide car fare, tokens, help with transportation services
- Outreach, case management
- Referrals—linkage with specialists, providers sensitive to underserved populations

Associated Problems and Complications
- No place to heal—efficacy of medical respite/recuperative care, supportive housing
- Fragmented care—multiple providers
- Masked symptoms/misdiagnosis
- Developmental discrepancies
- Functional impairments—assist with SSI/SSDI applications
- Dual diagnoses—integrated treatment for concurrent mental illness/substance use disorders
- Loss of child custody - support for parent of child abused by others, and for abused parent

Model of Care
- Integrated, interdisciplinary—coordinated medical, dental, and psychosocial services
- Therapeutic
- Multiple points of service
- Flexible service system—walk-ins permitted, help with resolving systems barriers
- Outreach sites—streets, soup kitchens, shelters, other homeless service sites
- Clinical standard guidelines
- Consumer and peer involvement
- Access to supportive housing

Modified from Bonin, E., Brehove, T., Carlson, C., Downing, M., Hoeft, J. Kalinowski, A., . . . Post, P. (2010). Adapting your practice: General recommendations for the care of homeless patients. Nashville: Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc. Retrieved from http://www.nhchc.org/wp-content/uploads/2011/09/GenRecsHomeless2010.pdf

conditions including but not limited to cognitive impairments, cold- and heat-related injuries, mental health, oral health, trauma, infectious disease, and end-of-life care.

Barriers to Health Care for the Homeless

Homeless populations face many barriers to healthcare services. Financial barriers and ability to get health insurance are obvious. Transportation to medical appointments is problematic; and competing needs for food, shelter, and money take priority.

Homeless individuals suffering from mental illness may be paranoid, disorganized, have nontraditional health beliefs, lack social support, and fear authority figures. Conditions living on the street make adherence to medical care problematic in terms of medication storage, inadequate sanitation, and poor nutrition (Montauk, 2006). To help homeless individuals overcome some of these barriers, nurse practitioners must work with a team of healthcare professionals poised to meet this population's unique circumstances. Federal efforts to provide care to homeless populations include bringing services to where homeless populations gather such as shelters, parks, soup kitchens, transportation centers, and places of worship. Outreach teams such as the aforementioned most often are based in healthcare centers where patients can be referred for additional care. Providing bus tokens for transportation, free medication, and a walk-in appointment system are other examples of strategies that can help remove obstacles to care.

Building trust is paramount and can be established by emphasizing patient strengths and capacity. Acknowledging that patients kept their appointment or took medication prescribed are examples of basic patient assets that should be recognized. The NHCHC guidelines point out that just meeting survival needs while homeless takes resourcefulness, patience, and tenacity.

Substance Use Disorders and Addiction

Substance use is a major public health problem in the United States. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), 10.1% of people age 12 years or older used illicit drugs in the past month, and 7.8% had a substance use disorder (SUD) in the past year (SAMHSA, 2015). Substance use disorders can mimic or coexist with other medical and mental health disorders; and nurse practitioners are in a unique position to provide screening for, urgent care to, and continuity of care for individuals and families who are at risk. Recurrent use of alcohol, tobacco, cannabis, stimulants, hallucinogens, and opioids can have devastating consequences causing clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home. Reducing SUDs and related problems among adults is critical for mental and physical health, safety, and quality of life. Alcohol use in the United States remains the most widely abused, with marijuana and illicit drug use (including nonmedical use of prescription painkillers) most prevalent (see **FIGURE 3-2**).

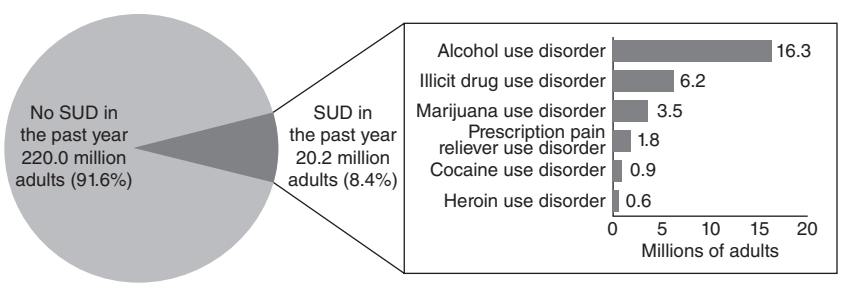


FIGURE 3-2 Trends in substance use disorders.

Reproduced from SAMHSA. (2017, June 29). Trends in substance use disorders among adults aged 18 or older. The CBHSQ Report. Retrieved from https://www.samhsa.gov/data/sites/default/files/report_2790/ShortReport-2790.html. Data from SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2014.

Impact on Patients

Patients with SUD and addiction have health, emotional, family, social, legal, and spiritual issues that can be troublesome to the patient, the family, and the healthcare provider. Major vulnerabilities include overdose, withdrawal symptoms, unintentional injuries, unintended pregnancy, neonatal complications, long-term health sequela, and disruption to the family unit. SUD is a constellation of cognitive, behavioral, and physiological symptoms that an individual displays but continues to use a harmful substance despite the associated negative consequences. The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (*DSM-5*), no longer uses the terms *substance abuse* and *substance dependence*; rather, it refers to substance use disorders, which are defined as mild, moderate, or severe to indicate the level of severity, which is determined by the number of diagnostic criteria met by an individual (SAMHSA, 2015).

Addiction

According to the American Society of Addiction Medicine (ASAM, 2017), addiction is a primary, chronic disease of brain reward, motivation, memory, and related circuitry. Dysfunction in these circuits leads to an individual pathologically pursuing reward and/or relief by substance use and other behaviors. Addiction is characterized by the inability to consistently abstain from and control behavior and cravings. It is characterized with diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response (see **FIGURE 3-3**). Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death. The term *dependence* implies both psychological craving and physiological symptoms of tolerance and withdrawal.

Vulnerable Populations and SUDs

In addition, the nurse practitioner must be aware of the special populations that are susceptible to substance use disorders. Adolescents are a high-risk population for marijuana, alcohol, and prescription pain medication obtained from the family medicine cabinet. Drugs used by gay men and men who have sex with men (MSM) at circuit parties can

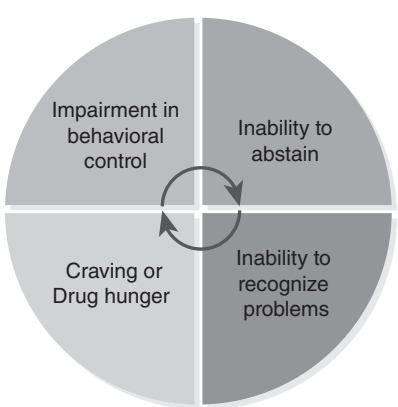


FIGURE 3-3 Characteristics of addiction.

impair judgment and result in risky sexual behavior. Adults that use illicit drugs may have a mental illness they are self-medicating for. As with any population, nurse practitioners working with the LGBT population must practice with competence and sensitivity. It is also important to recognize that chronic pain sufferers who are appropriately prescribed opioids are not substance users or necessarily considered "dependent."

Evaluation

Identifying and treating addiction or SUDs requires proactive assessment, awareness of signs and symptoms associated with abuse, the ability to develop an individual treatment plan, and the willingness to promote community-level policy change as appropriate. Important factors in deciding when and how to treat addiction include the patient's willingness to undergo treatment, social support network, health insurance coverage, financial resources, programs available in the community, and provider's skill level in treating addiction. When taking a patient history, the nurse practitioner must be cognizant of the red flags, which can provide clues to areas that will prompt further screening (see **BOX 3-4**).

Screening

The U.S. Preventative Services Task Force (USPSTF, 2014) concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening adolescents, adults, and pregnant women for illicit drug use. There are, however, many self-report screening tools to assess alcohol misuse and some are validated for detecting substance abuse. The CAGE questionnaire is thought to be 60–90% sensitive when two or more responses are positive and 40–60% specific for excluding alcohol abuse. The CAGE-AID has been modified for drug use. The CRAFFT test has been validated for screening adolescents for substance-related disorders (Conners & Volk, 2004). It should be noted the screening test is less important than the actual act of the clinician asking the patient about substance use.

Management and Treatment of SUDs

Patients who are addicts continue to use substances despite negative consequences. They may be frequently reluctant to stop using even when their plight gets desperate. The nurse practitioner will be most successful in improving their patients' chances

BOX 3-4 Red Flags for Substance Abuse Disorders

- Family history of alcohol or substance abuse
- Partner who is a substance abuser
- Frequent encounters with the police
- Arrests for driving under the influence (DUIs)
- Behavior changes reported by family members
- Sudden loss of job, financial problems
- Absence from school and work
- Depression or anxiety
- Sleep problems
- Complaints of sexual dysfunction

for change by understanding their desire to stop or reduce use. The NP can use a wide variety of therapeutic options including but not limited to brief motivational interventions, cognitive behavioral therapy, and targeted pharmacological treatment. Assuring medical and psychological stability is of paramount importance. Decisions regarding outpatient versus inpatient interventions must be considered carefully and long-term monitoring and follow-up care in the community should be part of the treatment plan. Obviously family members and friends are almost always impacted by the addicted patient's tobacco, alcohol, and/or drug use so that the nurse practitioner is in a key position to influence family dynamics and refer patients and families to support programs such as Al-Anon, Nar-Anon, or Alateen.

Refugee and Immigrant Health

The United Nations High Commission for Refugees (UNHCR, 2017) reports an unprecedented 65.6 million people around the world have been forced from home. Among them are nearly 22.5 million refugees, over half of whom are under the age of 18. Refugees, by definition, are fleeing their countries due to a well-founded fear of being persecuted "for reasons of race, religion, nationality, membership in a particular social group, or political opinion" (CDC, 2013).

By definition, asylum seekers have submitted a claim for refugee status and are waiting for this claim to be accepted or rejected. Refugees and asylees comprise the majority of displaced persons resettled to the United States (CDC, 2013). In the new millennium, nurse practitioners can contribute to improving the quality of life for displaced families, refugees, and immigrants by understanding the needs of new immigrants.

Top Countries of Origin

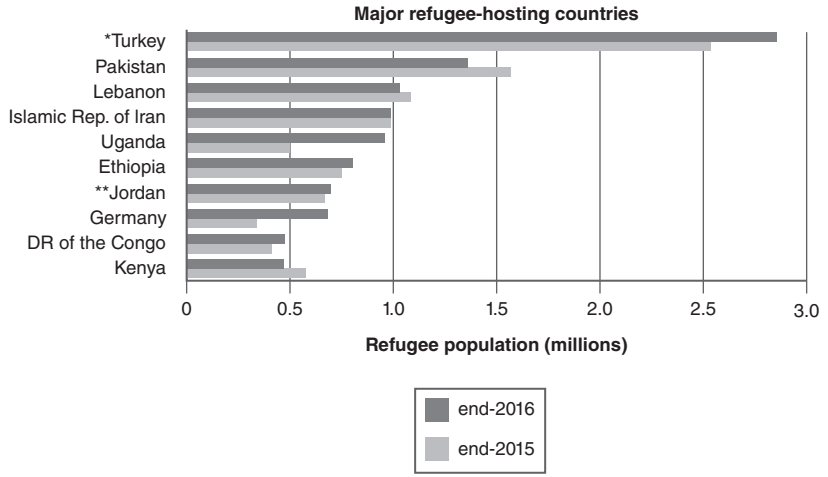
In 2016, the Syrian Arab Republic was the most common country of origin with some 824,400 newly recognized refugees fleeing the conflict there. Crises in sub-Saharan Africa led to new displacements with almost 737,400 from South Sudan. The next largest numbers of new refugees were from Burundi, Iraq, Nigeria, and Eritrea (UNHCR, 2016).

Major Host Countries

According to UNHCR, for the third consecutive year, Turkey hosted the largest number of refugees worldwide, with 2.9 million people (2016). It was followed by Pakistan (1.4 million), Lebanon (1 million), the Islamic Republic of Iran (979,400), Uganda (940,800), and Ethiopia (791,600) (see **FIGURE 3-4**). In 2016, UNHCR referred 162,600 refugees to states for resettlement. According to government statistics, 37 countries admitted 189,300 refugees for resettlement during the year, including those resettled with UNHCR's assistance. The United States admitted the highest number (96,900) with the top states for resettlement being Nebraska, North Dakota, Idaho, Vermont, and Arizona (Lopez & Bialik, 2017).

Resettlement Issues

When refugees arrive in the United States, not only are they leaving what they know, but they are also being introduced to an entirely new culture, language, food, and



* Refugee figure for Syrians in Turkey was a Government estimate.

** Includes 33,100 Iraqi refugees registered with UNHCR in Jordan. The Government estimated the number of Iraqis at 400,000 individuals at the end of March 2015. This include refugees and other categories of Iraqis.

FIGURE 3-4 Major host countries.

Reproduced from UNHCR. (2017). Global trends: Forced displacement in 2016. Geneva, Switzerland: Author. Retrieved from http://www.unhcr.org/globaltrends2016/

climate. To support the immediate transition, the U.S. Department of State (USDS, 2017) has cooperative agreements with national resettlement agencies to provide "Reception and Placement" services. Local affiliates of national refugee resettlement agencies arrange food, housing, clothing, employment, counseling, medical care, and other immediate needs for refugees during the first 90 days after arrival. Longer-term transitional support is also available for refugees by the Department of State's Bureau of Population, Refugees, and Migration.

Common Health Care Issues and Torture

Providing health care for resettled refugees is challenging. It requires knowledge of the healthcare and social conditions of the country of origin, attention to subtle expressions of acute and chronic illnesses, and a culturally sensitive approach to the individual and family. Historical estimates of the percentage of refugees who endure the trauma of torture have ranged between 5% and 35%. Studies of more recent waves of refugees from Somalia and Ethiopia have indicated torture prevalence rates as high as 69% (Miles & Garcia-Peltoniemi, 2012). Of immigrants from countries where torture is practiced, 6–12% say they have been tortured, but often refugees remain silent about the trauma they experienced (Miles & Garcia-Peltoniemi, 2012). Torture rates are highest in people seeking political asylum and persecution. Of asylum-seeking refugees from Somalia, Ethiopia, Eritrea, Senegal, Sierra Leone, Tibet, and Bhutan, 20–40% report being tortured (Miles & Garcia-Peltoniemi, 2012). The aftermath of witnessing and surviving cruelty and the violence of war leaves many

refugees with significant symptoms of psychological distress including post-traumatic stress disorder (PTSD), depression, and anxiety (Shannon, O' Dougherty, & Mehta, 2012). Chronic pain, post-concussion syndromes, sleep disturbance, and musculoskeletal symptoms can complicate the detection of other infectious and/or chronic conditions. The NP must become astute at identifying victims of torture. Asking direct questions has high sensitivity and specificity. **TABLE 3-3** represents possible physical and psychological morbidities that individuals may have endured in their home country or refugee camp. Eliciting this information is valuable for legal medical documentation for evidence should the refugee go to court to rule on asylum status as well as to be able to properly treat and refer the individual to reduce disability, pain, and distress.

Other concurrent health problems to consider include oral health problems, tuberculosis, hepatitis B, malaria, lead poisoning, anemia, and malnutrition. Infections such as sexually transmitted diseases (STDs) or intestinal parasites are also common. The NP must evaluate risk factors and potential exposures in the countries of origin. Catchup vaccinations and cancer screenings, both routine and as indicated by various risk factors, are important parts of complete health care for refugees (CDC, 2016).

Refugee Health Profiles

Health information and refugee health profiles can be an invaluable reference which provides key health and cultural information about specific refugee groups resettling in the United States.

The refugee health profiles information is a collaborative effort between the World Health Organization, the International Organization for Migration (IOM), the United Nations High Commissioner for Refugees, the U.S. Department of State, scientific research, and other sources (CDC, 2017).

The information gleaned from the profiles is provided to assist healthcare providers, public health and resettlement agencies to facilitate medical screening, and determine appropriate interventions and services for individuals of a specific refugee group. This comprehensive resource describes the demographic, cultural, and health characteristics of the specific population. It is the responsibility of the NP to gain an understanding of where refugees come from, the circumstances of their displacement, living conditions during asylum, and health conditions for which they may be at increased risk (see **TABLE 3-4**).

TABLE 3-3 Physical and Psychological Morbidities in Refugees

Physical Morbidity	Psychological Morbidity
■ Concussive trauma ■ Suspension, hyperflexion ■ Ligatures, binding, and compression ■ Sexual torture and genital mutilation ■ Burns, electrical shock, and cutting ■ Injurious environmental factors	■ Humiliation and degradation ■ Extreme fear witnessing torture ■ Isolation ■ Sleep deprivation ■ PTSD sequela from physical torture

TABLE 3-4 Refugee Health Profiles

Refugee Topic Information	Refugee Groups Currently Represented
Priority Health Conditions Background Population Movements Healthcare and Conditions Pre-arrival Medical Screening of U.S.-bound Refugees Post-arrival Medical Screening Health Information	Bhutanese Refugees Burmese Refugees Central American (Guatemalan, Honduran, Salvadoran) Refugees Minor Refugees Congolese Refugees Iraqi Refugees Syrian Refugees

Prison Health

The United States is home to 5% of the world's population, but houses 25% of its prisoners. According to statistics from the U.S. Department of Justice (USDJ), approximately 6,899,000 Americans are under correctional supervision; 4,751,400 people were under the supervision of probation and parole, and 2,220,300 individuals were incarcerated in prisons and jails (Kaeble, Glaze, Tsoutis, & Minton, 2016). During their lifetime, 1 in 9 American men and 1 in 56 American women are likely to spend time in prison (Center for Prisoner Health and Human Rights, 2017). When factoring in racial disparities the picture becomes bleak. The statistics on race and incarceration in the United States present an alarming view of a criminal justice system in which people of color are vastly overrepresented and face harsher penalties than their white peers. With an overwhelming number of African-Americans and Latinos in the criminal justice system who already come from impoverished backgrounds, the consequences on their incarceration have a grave impact on their ability to find adequate housing, employment, and health care in the post-incarceration period. Disruption to the family unit is high, with 1.7 million children under the age of 18 having an incarcerated parent (Center for Prisoner Health and Human Rights, 2017).

Healthcare Needs of Prisoners

The healthcare needs of prisoners are diverse and cover the range of conditions found in the general population; however, there tends to be an increased ratio of incarcerated individuals who enter with health problems confounded by alcohol and substance use and a history of general poor health and self-neglect prior to their sentence. Nurse practitioners are in a unique position to intervene at three distinct periods in the incarceration timeline including identifying risk factors prior to the incarceration, providing direct care during incarceration, and lastly providing interventions following release from prison and transition into society (see **TABLE 3-5**) (Daniels, 2016).

Clinical Practice Guidelines for Prison Health

The Federal Bureau of Prisons (BOP, 2017) makes clinical practice guidelines available for the public for information purposes and transparency. There are more than 30

TABLE 3-5 Incarceration Timeline Risk Factors

Pre-Incarceration Risk Factors	Incarceration Care	Post-Incarceration Stressors
African-American Poverty Urban-centered crime Mental illness Substance abuse Homelessness Parent who was incarcerated Failure to complete high school Childhood neglect and abuse	Screening and treatment of infectious disease Health education Preventative health Management of mental health disorders Oral health Managing issues of aging prisoners Encouraging family communication Referring prisoners for internal and external services	Lack of safety net, routine and boundaries Transition issued to halfway house living Lack of housing Lack of social network Stigma of being a felon Legal barriers Lack of rehabilitation while incarcerated (i.e., acquiring job training, GED) Lack of healthcare and community services

healthcare management guidelines including but not limited to the most common health problems prison populations encounter. Infectious disease guidelines include treatment for hepatitis, HIV, MRSA, tuberculosis, and sexually transmitted infections. Mental health guidelines include treatment for depression, bipolar disorder, schizophrenia, and chemical detoxification. Guidelines for management of chronic health problems such as diabetes, asthma, hypertension, and osteoarthritis are also available. The BOP also utilizes a medication formulary, which is a list of medications that are considered to be high-quality, cost-effective drug therapy for the population served. The primary goals of formulary management are to optimize therapeutic outcomes, maintain cost-effective care, and ensure drug usage is conducive within the correctional environment.

Interventions for Reintegration Post Incarceration

Developing a community transition plan is essential for reducing vulnerabilities the prisoner may encounter post-incarceration. As patient advocates, nurse practitioners must assist individuals to achieve their highest level of health and well-being post-incarceration. When working with these populations, understanding the prison discharge process and community resources in your catchment area is essential. Often ex-offenders find themselves obtaining care through federally qualified health centers (FQHCs) in medically underserved communities. Becoming familiar with all the services a FQHC can provide under one umbrella (e.g., internal medicine, dental, mental health, women's health, pharmacy assistance) will make for increased access to services with healthcare providers skilled at working with underserved populations. Working in a team with social and outreach services the NP can assist the client to identify new social networks and resources to meet basic needs including but not limited to church groups, legal aid, and vocational services. See **BOX 3-5** for an abbreviated community transition checklist for post-incarceration.

BOX 3-5 Transitioning to Life in the Community

Community Transition Checklist for Reentry

- Housing
- Basic Living Needs
- Income Sources
- Medical Care
- Prescriptions
- Mental Health
- Substance Abuse, After Care and Maintenance
- Disability Benefits and Compensation
- Legal Aid
- Social/Community Supports
- U.S. Veteran Services
- Dental Care
- Vocational Services
- HIV/AIDS Services
- Domestic Violence
- Senior Services
- Offenders: Sex, Female, and Ex-offenders

Data from Federal Bureau of Prisons. (2002). Clinical guidelines for social work professionals: Discharge assistance. Retrieved from https://www.bop.gov/resources/pdfs/discharge.pdf

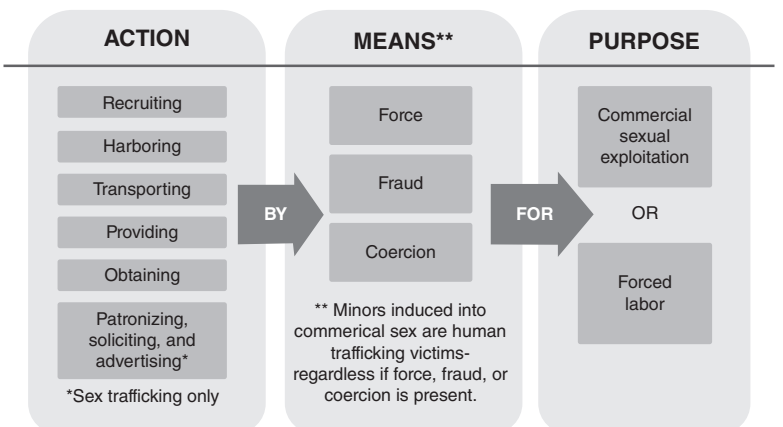


FIGURE 3-5 Human trafficking.

Reproduced from U.S. Department of Health & Human Services, Office on Trafficking in Persons. (2017). What is human trafficking? Retrieved from https://www.acf.hhs.gov/otip/about/what-is-human-trafficking

Human Trafficking

There are millions of persons across the globe who are victims of human trafficking (Morris & Vega, 2016). Human trafficking encompasses labor trafficking as well as sex trafficking and includes children, women, and men. The Office of Administration of Children and Families has within it an office that focuses on human trafficking, which likens human trafficking to modern slavery. Action, meaning, and purpose are three facets of criminal activities and exploitation, as depicted in **FIGURE 3-5**.

All of the vulnerable persons discussed in this chapter are at risk of being targeted for trafficking. Globally, there are approximately 1.2 million children being exploited for sex (Ernewein & Nieves, 2015). Human trafficking for sexual exploitation is one of the most lucrative criminal activities in our time period. Those that are brought here from other countries typically arrive in New York, Miami, or Los Angeles. However, looking within the United States we might think there are more foreign persons being exploited, but that is a false assumption. There are more U.S. citizens of all ages being trafficked within our own country (Ernewein & Nieves, 2015).

Gorenstein (2016) reported almost 88% of victims of sex trafficking visit an emergency department at some point. Nurse practitioners are therefore in a prime position to assess patients who may be victims of human trafficking. As mandatory reporters, NPs must recognize and report abuse. Providing confidentiality, safety, and a nonjudgmental manner is crucial to reduce barriers to communication.

Potential indicators of persons being trafficked include having someone with them who appears to be controlling them and the scenario, fear, sadness, bruises and other traumatic injuries, lack of documentation, poor health, discrepancy of behavior and reported age, and generally poor health (Ernewein & Nieves, 2015; Morris & Vega, 2016). Polaris Project (2016) suggests asking patients privately after assuring safety and confidentiality where they live and if they are free to come and go as they please, if they have been threatened or harmed, and if they have been forced to have sex or perform sex acts. Useful laboratory testing includes complete blood count, STD testing (including HIV), ova and parasites, hepatitis B and C, as well as tuberculosis. Nurse practitioners need to be astute at identifying the short- and long-term effects of human trafficking on individuals in order to develop a sound treatment (see **TABLE 3-6**).

Working with social services and law enforcement as a team can assist the NP to help get the victim to safety and into services to assist transitioning to safe housing with long-term treatment for psychological and medical issues. It is imperative that NPs be educated on identifying victims of human trafficking, developing culturally appropriate caring patient/provider relationships, becoming knowledgeable on reporting laws, and assisting colleagues to better identify and refer potential victims. **BOX 3-6** has a list of useful telephone numbers for victims and healthcare providers.

TABLE 3-6 Impact of Sex Trafficking on Victims

Short-Term Effects	Long-Term Effects
■ Higher risk behaviors (i.e., drug and alcohol abuse) ■ Impaired judgment ■ Emotional exhaustion ■ Depersonalization ■ Fear, anxiety, and nervousness ■ Muscle tension	■ Post-traumatic stress disorder ■ Trauma bonding ■ Severe depression ■ Suicidal ideation ■ Spiritual questions ■ Feelings of being mentally broken ■ Sexual dysfunction ■ Difficulty establishing/maintaining relationships

BOX 3-6 Telephone Numbers for Victims and Health Care Providers

- The Childhelp National Child Abuse Hotline: (800)-4ACHILD
- National Runaway Safeline: (800)-RUNAWAY
- National Human Trafficking Resource Center: (888)-373-7888

Gender Identity, Expression, and Sexual Preference

Recently a baby was born in Canada that was not given a genital inspection at the birth, which was outside the medical system, and was given a health card by the government with a "U" (unidentified/unknown) for gender/sex (Rahim, 2017). The parent, who identifies as nonbinary, transgender, wants the child to choose a gender identity when ready to. This is likely the first known documentation of an infant to not have a gender/sex assigned upon birth by the choice of the parent(s). Approximately 1.4 million people in the United States identify as transgender (Flores, Herman, Gates, & Brown, 2016). Facebook has over 60 options for choosing gender. Unfortunately, in 2016 there were at least 28 known transgender women reported killed, and the vast majority were of color (Schmider, 2016). Harassment, bullying, assault, homelessness, and health disparities are issues that lesbian, gay, bisexual, transgender, queer, questioning, and intersex (LGBTQ/QI) face daily. Nurse practitioners need to be aware of the issues surrounding children and adults whose gender identity, gender expression, and/or sexual preference(s) are different from the binary, cultural norm that the NP may be comfortable with.

Gender dysphoria is a term that defines a person who has distress with clinical symptomatology because their gender identity is not consistent with the gender assigned at birth. Terminology is critical to be familiar with, to maintain open communication with patients, potential patients, and their significant others. For some, gender may be fluid, as well as sexual partner(s) preference, meaning that one may identify more with female one day and more with male on another day, or may be more attracted to male, female, both, or none at varying times (see **TABLES 3-7** and **3-8**).

TABLE 3-7 Commonly Used Gender Identity Terminology (not all-inclusive)

Agender	Does not identify with a gender
Androgynous	Identifies as mixed or neutral gender
Bigender	Identifies as a combination of male and female gender
Cisgender	Identifies with the gender assigned at birth
Gender fluid	Gender is not static, but shifts
Genderqueer	Does not identify with a gender, falls in between or beyond gender
Pangender	Identifies as all genders

TABLE 3-8 Commonly Used Sexual Preference or Affectional Orientation Terminology (not all-inclusive)

Asexual	Not attracted to any gender
Bisexual	Attracted to male and female genders, but does not have to be at the same time or with the same intensity
Gay	A male attracted to males
Heterosexual	Attracted to a gender/sex that is not one's own
Homosexual	Attracted to the same gender/sex as one's own
Lesbian	A female attracted to females
Pansexual	Attracted to people regardless of gender, gender identity, or gender expression

Health-related disparities are significant in these populations, and sadly many do not seek health care because of fears of being judged or marginalized by healthcare providers and those working in the health system. In addition to the routine health maintenance needs for all children and adults, providers must be aware of health issues that are significantly associated with LGBTQ/QI. These issues include depression, which could be associated with gender dysphoria but may be related to other causes, anxiety, prevention, and/or treatment from being victims of bullying and violence, substance abuse, and suicide attempts. In addition, the provider must be aware of where to refer patients to appropriate mental health specialists, substance abuse counselors, HIV testing and treatment, and specialists for hormone therapy, as well as surgical options for those who are seeking these interventions. As noted earlier, transgender women of color are at high risk of being victims of violence, including homicide, so that providing education regarding safety is a priority if the patient is agreeable to discussing options.

Children and adolescents who are gender nonconforming require support and acceptance of parents/caregivers and healthcare providers (Alegria, 2011). While transient role-play of opposite gender occurs in young children, some may continue to express themselves in nonconforming genders, and a subset may continue to identify as other gender. The NP should be aware of experienced counselors and providers to refer families to so that they can have accurate information and support services if needed. This is very important if there are decisions to be made for an adolescent to transition (Alegria, 2011). It is imperative for NPs to be aware of the distress and dysphoria experienced by many as they move into puberty as this is a time when severe depression and suicidal attempts may occur (Alegria, 2011). Approximately 50% of gender nonconforming youth do not have the support of their family, and the risk of abuse, homelessness, substance abuse, and sex work increases (Grossman & D'Augelli, 2007). NPs must be aware of these potential issues and provide compassionate, sincere support in these instances.

Offering an environment in the clinic/office that is safe, inclusive, and nonjudgmental is also paramount. All healthcare providers must be able to put any biases aside. Reflecting on how one views and feels about these issues in advance can help to avoid uncomfortable interactions. If one cannot put biases aside, then it is imperative to know where to refer people to for care. The clinic/office can hang a rainbow flag to show visible support. Another important item is to not assume that anyone (whether adult or child) has a partner or parent(s) who are male, female, or has one or more mothers or fathers. When approaching patients who identify or express themselves as non-cisgender, asking how they would prefer to be addressed is acceptable if done in a considerate manner. Some people may prefer "he" or "she," or perhaps "they" or "ze." Providing care to persons of all backgrounds and beliefs requires NPs to keep up to date with issues facing patients and to continue to reach out to offer assistance with compassion and honesty in a confidential and safe environment.

HIV/AIDS

Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) have been around for almost 100 years that we are aware of (CDC, 2017). The virus is believed to have been spread to humans from chimpanzees during the 1920s in the Republic of Congo. Yet the stigma and discrimination associated with HIV infection remains a huge concern as well as cause for many who either do not get tested and/or do not seek health care. Those most at risk for acquiring HIV globally include women, children, men who have sex with men, transgenders, injection drug users, sex workers, and prisoners. These populations are often marginalized and suffer discrimination in many parts of the world. Educating our communities and patients about HIV/AIDS can help to get more people into care early, which can increase their life span, reduce the community viral load, and decrease the stigma associated with HIV/AIDS.

In 1981, there were initial reports of five gay men who were infected with *Pneumocystis carinii* pneumonia (Gottlieb, 2001); and in 1982, there were reports of women being infected as well as reports of infections from transfusions and vertical transmission (Sepkowitz, 2001). One of the most famous cases of AIDS discrimination occurred in the 1980s. Ryan White, age 13, was infected by a blood transfusion containing HIV. His school prevented him from attending classes, due to unfounded fears of him infecting other students. The case gained much attention, which helped to educate many about HIV. Unfortunately, White died before the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act was passed by Congress (HRSA, 2016), which would have protected him from discrimination.

Globally, in 2015, there were over 36.7 million people living with HIV (World Health Organization [WHO], 2016). Twenty-seven percent of newly infected people in 2015 were between the ages of 15 and 24 (Kaiser Family Foundation, 2017). In the 1990s the addition of protease inhibitors for the treatment of HIV significantly decreased morbidity and mortality of those infected with HIV. Over the past 35 years, treatment options have improved so much that there are many who view HIV infection as a chronic disease if patients adhere to medication regimens and medical monitoring and visits. However, stigma and discrimination around HIV/AIDS continues across the world and are the leading barriers to prevention and early treatment (UNAIDS, 2014).

According to the United Nations Programme on HIV/AIDS, "HIV-related stigma refers to the negative beliefs, feelings and attitudes towards people living with HIV, groups associated with people living with HIV (e.g. the families of people living with HIV) and other key populations at higher risk of HIV infection. HIV-related discrimination refers to the unfair and unjust treatment (act or omission) of an individual based on his or her real or perceived HIV status" (UNAIDS, 2014, p. 2). They have been measuring stigma faced by HIV-infected persons internationally for years. The program also guides nations and communities on best practices for reducing the stigma and discrimination facing persons living with or at risk of HIV infection. Strategies promote developing strategies Emphasis is placed on developing strategies to care for HIV-infected persons and their families, paying close attention to discrimination against women, girls, sex workers, transgenders, and drug users. Programs are targeted to specific groups represented in the community, including families, the workplace organizations, and healthcare facilities. Strengthening the legal system to protect the human rights of those infected or at risk of infection with HIV is paramount. Nurse practitioners need to educate their office/clinic staff, colleagues, and communities about the myths and facts of HIV transmission and infection. Maintaining a level of knowledge to best serve patients is the best approach, to play a part in reducing the stigma and discrimination fears surrounding HIV/AIDS.

More information on HIV/AIDS is covered in chapter eightthe Population Health chapter in this book.

Section Three: Developing Population-Based Programs for the Vulnerable

Needs Assessment for a Vulnerable Population

A *needs assessment* is the process of *identifying* and *measuring* areas for improvement in a target population, and determining the methods to achieve improvement. It is different than a list of needs. All of the populations discussed in this chapter, as well as many others not specifically addressed in this book, require initial and periodic assessments of the needs of the population within a certain community. That community may be a local, state, national, or virtual community. For example, it may be within a prison system or a school system. There are different approaches to conducting community needs assessments. All needs assessments begin with target population identification and development of an action plan.

Needs Assessment Framework and Plan

Once you have identified the population of interest, it is necessary to write out the plan, starting with bullet points to develop the framework for the needs assessment. Tasks that need to be considered include the following:

- Formulate a clear description of the population that will be the focus of the needs assessment.
- Create a rationale for why this assessment is being done: What is the purpose and what are the objectives and goals?

- Establish the current problems and the strengths of existing conditions and resources.
- Survey other agencies/organizations in the community to avoid unnecessary overlap in program activities and to identify emerging issues and new resources.
- Interview key informants and community members who have knowledge of or experience with the problem.
- Identify the stakeholders (community members, families, friends, businesses, hospitals, sports organizations, etc.).
- Determine if this needs assessment fits in with a local or state organization's mission and strategic plan. If so, will you be working with someone from that organization in developing and/or implanting the needs assessment?
- Identify who you might collaborate with for best outcomes, if appropriate. For instance, this might require an interprofessional team/committee.
- Discover how the assessment relates to local and global healthcare trends, systems, and policies with the focus on future trends, professional standards, clinical practice guidelines, etc.
- Determine barriers and gaps that exist, to address in the needs assessment.
- Recognize any available resources already in place.

Process Measures

Once you have identified the key issues that the needs assessment will address, it is necessary to decide what process measures will be utilized. For instance, is there a valid survey or questionnaire for data collection, and/or will focus groups be a part of the assessment? Interviews, community forums, public meetings, etc. are all excellent ways to collect information from the community of interest, but you must have the right questions for each key issue that the needs assessment is seeking to assess. Develop a sampling plan for a small pilot group which will help identify any problem issues that need to be redesigned or addressed prior to the larger sample needs assessment.

Gap Analysis and Results

Using appropriate statistics and analysis for the results of the needs assessment, include the following gap analysis:

- Findings about met and unmet needs from the assessment data
- Information about existing prevention services, resources, funding, and populations served
- Secondary data about availability, accessibility, and appropriateness of existing services for the target population
- Cross reference of needs with existing assets

Consider potential uses of the results; summarize the gap analysis by target population and proposed service needs. Develop an action plan to address the unmet needs of the target population. The action plan should have objectives with corresponding timelines. Short-term, intermediate, and long-term goals should be identified. Recommendations must include budgetary considerations including a cost-benefit analysis if appropriate. Be specific, including timelines and people responsible for data collection. Share this information with the key stakeholders and community members to obtain needed support for implementation of the action plan.

Chapter Summary

Given the ever-changing demographic population in the United States and demands for globalization, there is a growing body of knowledge regarding vulnerability and health disparities. Whether your interactions with vulnerable populations is a vocation or an avocation, the rewards are worth the effort put forth to improve the health of those in need. Advocacy is a key role that nurse practitioners can play to benefit patients, families, and communities alike. With advanced education, nurse practitioners have the ability to design, implement, and evaluate individual and population-focused models to ensure that the needs of the vulnerable are met.

Seminar Discussion Questions

1. Identify factors which makes a person or population vulnerable?
2. Is there a specific vulnerable population that you want to learn more about and why?
3. How would you begin developing a needs assessment on a particular vulnerable population?
4. Mary comes in to the urgent care clinic with a broken nose. She appears to be a young teen, perhaps 13 or 14, but says she is 21 years old. She is disheveled and very quiet, answering only with a few words and keeps her eyes downcast. There is a couple (man and woman) who appear to be in their 30s accompanying the girl to be treated. They continue to stare at her and refuse to leave her side. Your attending physician colleague is busy transferring a trauma patient. What are your next steps in specific order?
5. Reach out to an NP working in the prison system or with the homeless. Interview this person about how to approach patients. Does the interviewee deal with legal issues on a daily basis that impede providing health care in the manner preferred?

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