

MEDAVIE

HealthEd

ÉduSanté



THE CHALLENGED PATIENT

Advanced Care Paramedicine

Module: 11

Section: 03a

- Introduction
- Physical disabilities
- Mental challenges
- Developmental disabilities
- Pathological challenges

- You have arrived on scene for a 31-year-old man who has cerebral palsy and cannot walk. The patient is deaf and asks you to speak directly at him so that he can read your lips. He is easy to understand when he speaks. He states he has a temperature of 38°C and wants to be seen by a doctor because he doesn't "feel well."
- Vitals:
 - Pulse is 118
 - RR 20
 - BP 118/62
 - SpO2% 100% RA
 - Skin is warm and moist



- Many patients have met their challenges so successfully
 - Virtually unnoticeable
- Paramedics must deal with the immediate problem
 - Recognize challenges
 - Make accommodations for care

Patients with Special Health Care Needs

PHYSICAL CHALLENGES

- A disability that limits a person's physical capacity to move, coordinate actions, or perform physical activities.
- It is also accompanied by difficulties in one or more of the following areas:
 - Physical and motor tasks
 - Independent movement
 - Performing daily living functions.

- Patients with ongoing physical challenges may require special considerations during the assessment and management process.
- Some physical challenges:
 - Hearing impairment
 - Visual impairment
 - Speech impairment
 - Obesity
 - Paraplegia
 - Quadriplegia.

Patients with Special Health Care Needs

HEARING IMPAIRMENTS

- **Conductive deafness**
 - Blockage of the transmission of sound waves through the external ear canal to the middle or inner ear that is usually temporary
 - Usually caused by earwax, infection, middle ear injury (barotrauma)
- **Sensorineural deafness**
 - Occurs when the tiny hairs in the cochlea are damaged or destroyed. It can also be a result of damage to the auditory nerve inhibiting transmission of a signal from the cochlea to the brain. (Usually permanent)

- Presbycusis
 - Occurs from changes in the inner ear, auditory nerve, middle ear, or outer ear that comes on gradually as the person ages.
 - Can also occur as a result of loud noise, head injury, heredity, and infections.
- Tinnitus
 - A ringing, roaring sound, or hissing in the ears that is usually caused by certain medications (ASA) or exposure to a loud noise.
 - Not a disease but rather a symptom.

- Asking questions repeatedly
- Misunderstood questions or inappropriate responses
- Presence of a hearing aid
- Sign language or gestures

- Hearing aids come in various shapes and sizes





- Determine usual method of communication
- Address patient face to face
- Try not to use complicated language or large words
- Talk at a slow and even pace
- Do not exaggerate your pronunciation
- Reduce background noise as much as possible
- Help find or adjust hearing aids
- Use pen and paper
- Utilize an interpreter

Patients with Special Health Care Needs

VISUAL IMPAIRMENTS

- Some patients have pre-existing visual impairment that varies from complete loss of sight (blindness) to blurred vision.
 - **Partially sighted**
 - Refers to a person who has some type of visual problem and may need assistance
 - **Low vision**
 - Refers to individuals who are unable to read a newspaper at the usual viewing distance even if they use glasses or contact lenses. It is not limited to distance vision and can be a severe visual impairment.
 - **Legally blind**
 - Refers to a person who has less than 20/200 vision in at least one eye or has a very limited field of vision (e.g., 20 degrees at its widest point).
 - **Totally blind**
 - Refers to anyone who has no vision and uses nonvisual media or reads via Braille

- Injury
- Disease
 - Glaucoma
 - Diabetic retinopathy
 - Cataracts
- Congenital conditions
- Infection
- Degenerative disorders of the eyeball, optic nerve or nerve pathways

- Individuals who are visually impaired can maintain active, independent lives



- Approach the patient so that they know you are there
- Explain procedures
- Explain any movements
 - Allow person to take your arm for guidance
- Utilize visual aids if possible
- Service dogs
 - Do not interfere with service dogs
 - Make accommodation for transporting the dog (service dogs are allowed in ambulance)

Patients with Special Health Care Needs

SPEECH IMPAIRMENTS

- Speech impairments include disorders of language, articulation, voice production, or blockage of speech (fluency).
- All of these can lead to an inability to communicate effectively.
- Delayed development of language in a child may result from hearing loss, lack of stimulation, or emotional disturbance

- Language disorders
 - Sensory aphasia
 - Motor aphasia
 - Global aphasia
- Articulation disorders
- Voice production disorders
- Fluency disorders

- Language disorders
 - CVA
 - Tumor
 - Head injury
 - Hearing loss
 - Delayed development
 - Emotional disturbance
- Articulation disorders
 - Damage to nerve pathways
 - Delayed development
- Voice production disorders
 - Laryngeal muscle disorders
 - Hormonal or psychiatric disturbance
 - Hearing loss
- Fluency disorders
 - Stuttering

- Never assume the person lacks intelligence.
- Form questions that require short, direct answers.
- Never pretend to understand when you don't.
- Let the patient write answers to questions.

Patients with Special Health Care Needs

OBESITY

- Obesity is an excessively high amount of body fat in relation to lean body mass.
 - Overweight refers to a state of increased body weight in relation to height
 - Morbid obesity refers to a BMI > 40 kg/m²
- Excess weight can exacerbate the complaint for which you were called.
- Obesity can lead to many serious medical conditions.

- Physical Complications

- Arthritis
- Coronary artery disease
- Early disability and death
- Higher risk for impaired mobility
- Hypertension
- Ischemic stroke
- Orthopedic complications caused by bearing excess weight
- Pulmonary dysfunction (including asthma)
- Sleep apnea
- Some forms of cancer
- Type 2 diabetes mellitus

- Emotional Complications

- Discrimination at work and school
- Eating disorders
- Feelings of depression and rejection
- Isolated and/or stigmatized socially
- Low self-esteem
- Poor body image

- Don't dismiss signs or symptoms as being a result of obesity.
 - e.g. shortness of breath,
- Adipose tissue presents an obstruction
 - EKG electrodes may need to be placed on the arms and legs.
- Do not compromise your health or safety
 - Ask for assistance when lifting or moving a patient.

Patients with Special Health Care Needs

PARALYSIS

- Spinal cord injuries damage the spinal cord and result in varying degrees of ability after the injury.
- Most instances result in some degree of paralysis or weakness.
 - Paraplegia
 - is weakness or paralysis of both legs and possibly the trunk.
 - Quadriplegia (tetraplegia)
 - is weakness or paralysis affecting the level below the neck and chest area, involving all four extremities.

- Loss of involuntary functions with very high injuries from C1 to C4 (e.g., the ability to breathe, requiring the use of a mechanical ventilator or diaphragmatic pacemaker)
- Low blood pressure
- Inability to regulate blood pressure effectively
- Dysfunction of bowel and/or bladder
- Sexual dysfunction (decreased fertility in men)
- Reduced control of body temperature
- Inability to sweat below the level of injury, making the person more prone to heat exhaustion and heat stroke
- Chronic pain

- The patient may have a home ventilator
 - Keep the airway clear and patent.
- If the patient is in halo traction
 - Stabilize the traction before transport.
- Be aware of other assistive devices
 - Colostomy, canes, wheelchairs, etc.

Patients with Special Health Care Needs

MENTAL DISABILITIES

- Mental illness refers to any form of psychiatric disorder.
- It is a biologically based brain disorder and can profoundly disrupt a person's thinking, moods, ability to relate to others, feelings, and capacity for coping with the demands of life.
- Two broad categories:
 - Psychoses
 - Neuroses

- Types of Mental Illness
 - Attention deficit/hyperactivity disorder
 - Autism and pervasive developmental disorders
 - Bipolar disorder
 - Borderline personality disorder
 - Major depressive disorder
 - Obsessive-compulsive disorder
 - Panic and other severe anxiety disorders
 - Schizoaffective disorder
 - Schizophrenia

- Recognizing mental illness may be difficult
- Obtaining the patient history
- Be aware of paranoia or anxious behaviour
- Do not assume that the patient's complaint is directly related to their mental illness
- Patient and/or paramedic safety

Patients with Special Health Care Needs

DEVELOPMENTAL DISABILITIES

- Include some degree of impaired adaption in learning, social adjustment, or maturation.
 - Down's syndrome
 - Fetal alcohol syndrome
 - Autism Spectrum Disorders

- Chromosomal abnormality (Trisomy 21)
- Mild to moderate developmental disability
 - Eyes sloped upward (almond shaped)
 - Folds of skin cover inner corner of eye
 - Small face and features
 - Large protruding tongue
 - Flattening of back of head
 - Short broad hands



- Preventable disorder related to maternal alcohol consumption
- Similar characteristics to Down syndrome
 - Small head with multiple facial abnormalities
 - Small eyes with short slits
 - Wide flat nose bridge
 - Lack of groove between nose and lip
 - Small jaw



- Also referred to as pervasive developmental disorders
- Includes:
 - Autistic disorder
 - Pervasive Developmental Disorder – NOS
 - Asperger Syndrome
 - Childhood Disintegrative Disorder
 - Rett Syndrome

- Developmentally disabled people may have trouble communicating, but can often still understand what you say



- May be difficult to recognize unless they are in institutional care
- Patient can recognize body language, tone and disrespect
 - Treat them as you would any other patient
- Severe cognitive disability
 - You may have to rely on others for history

Patients with Special Health Care Needs

EMOTIONALLY/MENTALLY IMPAIRED

- Emotional impairments include:
 - Nervous exhaustion
 - Anxiety neurosis
 - Compulsion neurosis
 - Hysteria.

- Refers to persons who have impaired intellectual functioning (e.g., mental retardation), which results in an inability to cope with normal responsibilities of life

Patients with Special Health Care Needs

PATHOLOGICAL CHALLENGES

- Arthritis
- Cancer
- Cerebral Palsy
- Cystic Fibrosis
- Multiple Sclerosis
- Muscular Dystrophy
- Poliomyelitis
- Previous head injury
- Spina Bifida
- Myasthenia Gravis

- Osteoarthritis
- Rheumatoid arthritis



Osteoarthritis



Rheumatoid Arthritis

- Cancer is a group of diseases that allow for an unrestrained growth of cells in one or more of the body organs or tissues.
- Take every effort to protect cancer patients from infection



- Non-progressive neuromuscular disability in which the person has difficulty controlling the voluntary muscles due to damage to the fetal brain during the later months of pregnancy, during birth, during the newborn period, or in early childhood.



- An inherited metabolic disease of the lungs and digestive system that manifests in childhood.
 - Excessive bronchiole mucous
 - Pancreatic enzyme retention



- A progressive and incurable autoimmune disease of the CNS affecting the myelin



Muscular Dystrophy

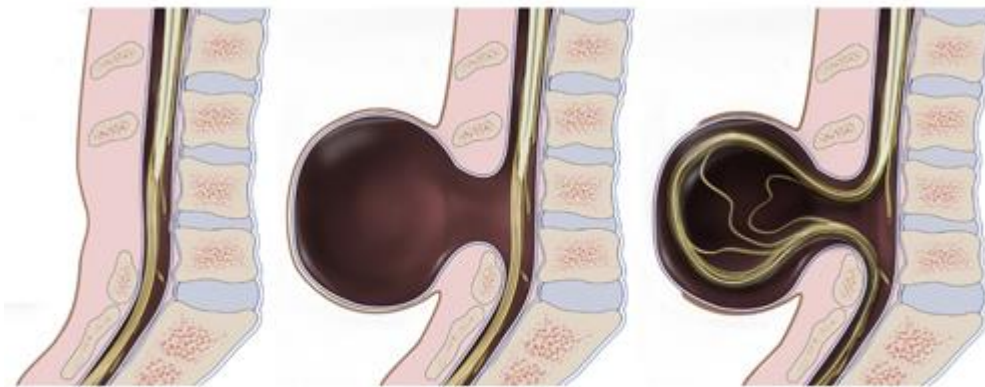
- A group of inherited muscle disorders that results in a slow but progressive degeneration of muscle fibers, leading to increasing weakness that spreads over the entire body
- The disease is classified according to the age that symptoms first appear, the rate at which the disease progresses and the way in which it is inherited
- Muscular dystrophy is incurable



- An infectious disease caused by Poliovirus hominis.
- Poliovirus is usually transmitted by direct fecal-oral contact, indirect contact with saliva or feces, respiratory secretions, or contaminated water.
- The virus enters the body through the mouth, multiplies in the intestine, and then spreads to lymph nodes and the blood.
- Once multiplied, the virus tends to attack the motor neurons of the spinal cord and brainstem.

- Traumatic brain injury (TBI) can result from many mechanisms of trauma.
- These injuries can affect many cognitive, physical, and psychological skills.
 - Physical deficits can include problems with ambulation, balance, coordination, fine motor skills, strength, and endurance.
 - Cognitive deficits of language and communication, information processing, memory, and perceptual skills are common.
 - Psychological status also is often altered.

- The back portion of the vertebrae fails to close, usually in the area of the baby's lower back.
- Meninges, the spinal cord, or both may protrude through this opening.



Spina bifida occulta

Meningocele

Myelomeningocele

- An autoimmune disorder in which muscles become weak and tire easily.
- The disorder is caused by the attack of lymphocytes on the acetylcholine receptors found on the voluntary skeletal muscle side of neuroeffector junctions.
- Fewer receptors are available to be stimulated, and the antibodies of the immune system often attach to the receptors, blocking them from being stimulated.
- When the presynaptic neuron releases acetylcholine, instead of stimulating a muscle contraction as normal, the neurotransmitter is blocked

Patients with Special Health Care Needs

OTHER CHALLENGES

- Culturally diverse patients
- Terminally ill patients
- Patients with communicable diseases
- Financial challenges

Patients with Special Health Care Needs

CULTURAL DIVERSITY

- Achieving cultural competence is a learning process requiring:
 - Self-awareness
 - Reflective practice
 - Knowledge of core cultural issues
- Involves recognizing one's own culture, values and biases, and using patient-centered communication skills
- Requires adaptation to the unique needs of patients of backgrounds and cultures that differ from one's own

- Culture in the broadest sense reflects the whole of human behavior, including:
 - Ideas and attitudes
 - Ways of relating to each other
 - Manners of speaking
 - Material products of physical effort, ingenuity, and imagination

- “Culture” includes:
 - Language
 - Beliefs
 - Etiquette
 - Law
 - Morals
 - Entertainment
 - Education
 - Sets of dynamically evolving shared traits

- The use of physical characteristics (e.g., gender or skin color) to distinguish a cultural group or subgroup can be a trap
- There is a sharp difference between distinguishing cultural characteristics and distinguishing physical characteristics

- Stereotyping occurs through two cognitive phases:
 - In the first phase, a stereotype becomes activated when an individual is categorized into a social group.
 - In the second phase, people use these activated beliefs and feelings when they interact with the individual, even when they explicitly deny these stereotypes.

- Culturally competent care requires health care providers be sensitive to:
 - Patients' heritage
 - Sexual orientation
 - Socioeconomic situation
 - Ethnicity
 - Cultural background

- Achieving cultural competence is a learning process that requires self-awareness, reflective practice, and knowledge of core cultural issues
- It involves recognizing one's own culture, values and biases, and using effective patient-centered communication skills

- Cultural encounters
 - The continuous process of interacting with patients from culturally diverse backgrounds in order to validate, refine or modify existing values, beliefs, and practices about a cultural group
- Cultural desire
 - The motivation of the health care professional to “want to” engage in the process of becoming culturally competent; not the “have to”

- Cultural awareness
 - The deliberate self-examination and in-depth exploration of the biases, stereotypes, prejudices, assumptions, and “isms” that people hold about individuals and groups who are different from them
- Cultural knowledge
 - The process of seeking and obtaining a sound educational base

- Cultural skill
 - The ability to collect culturally relevant data regarding the patient's presenting problem, as well as accurately performing a culturally based physical assessment in a culturally sensitive manner

- Cultural humility involves the ability to recognize one's limitations in knowledge and cultural perspective and be open to new perspectives.
- Cultural humility involves self-reflection and self-critique with the goal of having a more balanced, mutually beneficial relationship.

- Influences on the way patients seek medical care and the way clinicians provide care include:
 - Age
 - Gender
 - Race
 - Ethnic group
 - Cultural attitudes
 - Regional differences
 - Socioeconomic status

- Poverty and inadequate education disproportionately affect various cultural groups:
 - Ethnic minorities and women
 - Socioeconomic disparities negatively impact the health and medical care of individuals belonging to these groups

- Cultural differences are malleable in a way that physical characteristics may not be.
- Modern technology and economics may eventually lead to universality in language, but we can begin by acknowledging and overcoming our individual biases and cultural stereotypes.
- Use of medical interpreters has a positive impact on health care.

- Predicting an individual patient's character merely on the basis of common cultural traits is not appropriate.
- Cultural attitudes may constrain professional behavior and confuse the context in which the patient is served.
- The individual is unique.

- Health beliefs and practices
- Faith-based influences and special rituals
- Language and communication
- Parenting styles and role of family
- Sources of support beyond family
- Dietary practices

- Patients have a view of health and illness and an approach to cure shaped by a cultural paradigm.
- Patients with a “scientific view” are more comfortable with Western medical care.
- Patients with a “holistic” or natural approach may be at odds with Western medical care.

- Religion to which patient adheres
- Significant persons for guidance and support
- Special religious practices and beliefs that affect health care when patient is ill or dying
- Celebrated events, rituals, or ceremonies that are considered important in the patient's life cycle



Being sensitive to cultural differences that may exist between you and the patient can help avoid miscommunication.

- Primary language, secondary language
- Command of English, literacy
- Special signs that demonstrate respect or disrespect
- Role of touch in communication
- Culturally appropriate ways to enter and leave situations
- Need for interpreter acceptable to the patient

- Family roles and decision makers
- Family composition and extent
- Marriage customs, attitudes on divorce
- Role of and attitude toward children: affection and methods of discipline
- Major family events and means of celebration
- Practices regarding conception, pregnancy, childbirth, lactation, and childrearing

- Individuals, groups, and organizations can influence the patient's approach to health care
- Patient's cultural group influences the patient's approach to health care
- Patient's need for relationships with others: gregarious or loner

- Family food preferences
- Responsibility for food preparation
- Culturally forbidden or required foods
- Methods of preparation and consumption
- Foods used in rites or ceremonies, fasting
- Food beliefs (e.g., foods believed to cause or to cure illness)
- Periods of required fasting

- The ability to understand and respect differences and to allow for the blurring of professional borders is a measure of one's ability to form reinforcing relationships with other health care professionals and to care for a wide range of individuals.

- Disease is shaped by illness, and illness is shaped by the totality of the patient's experience.
- Cancers are diseases—the patient dealing with, reacting to, and trying to live with a disease is having an illness.
- Health care providers must consider the substance of illness—the biologic, emotional, and cultural aspects—or else fail to offer complete care.

- Make sure you explore and understand the patient's cultural beliefs and practices
- Avoid making assumptions about cultural beliefs and behaviors without validation from the patient
- Beliefs and behaviors that will have an impact on patient assessment include the following:
 - Modes of communication
 - Health beliefs and practices
 - Diet and nutritional practices
 - Nature of relationships within a family

- The use of speech, body language, and space
- Communication and culture are interrelated, particularly in the way feelings are expressed verbally and nonverbally
- The cultural and physical characteristics of both patient and practitioner may significantly influence communication

- Patient view of health and illness
- Attitudes about pain, illness, death, disability
- Hygiene practices
- Common treatments of illness
- Use of prevention measures
- Sensitive/taboo health topics
- Family member responsible for health decisions
- Preference of health professionals

- Family structure and the social organizations to which a patient belongs are among many imprinting and constraining cultural forces in a person's life.
- One type of already known behavior may predict another type of behavior.
- A patient may belong to many groups, and the attitudes and behaviors of one group can modify and impact the cultural values of the other groups to which the person belongs.

- Beliefs and practices related to food, as well as the social significance of food, play a vital role in everyday life.
- Some of these beliefs of cultural and/or faith-based significance may have an impact on your care:
 - Orthodox Jew
 - Muslim
 - Chinese
 - Herbal, home, and natural therapies

1. The individual is the "foreground," and the culture is the "background."
2. Different generations and individuals within the same family may have different sets of beliefs.
3. Not all people identify with their ethnic cultural background.
4. All people share common problems or situations.
5. Respect the integrity of cultural beliefs.
6. Realize that people may not share your explanations of the causes of their ill health but may accept conventional treatments. Do not try to "convert" a patient to another way of thinking to get the desired result.
7. You do not have to agree with every aspect of another's culture, nor does the person have to accept everything about yours, for effective and culturally sensitive healthcare to occur.
8. Recognize your cultural assumptions, prejudices, and belief systems. Do not let them interfere with patient care.

- The patient states he has been feeling well until last night. He states that at that time he "started to get right flank pain." He states he is unable to urinate on his own and has to catheterize himself to pass urine. He has a history of urinary tract infections. He has been hospitalized for pneumonia in the past. He does not drink or smoke. Physical examination reveals a patient in mild respiratory distress with moist, warm skin. He has clear lung and heart sounds. He has mild suprapubic abdominal pain.

Patients with Special Health Care Needs

COMMUNICABLE DISEASES

- Exposure to some infectious diseases can pose a significant health risk to EMS providers.
- Important to ensure PPE use on *every* call
- Required precautions depend on the mode of transmission and the pathogen's ability to create pathologic processes.

Patients with Special Health Care Needs

TERMINALLY ILL

- Patients with terminal illness are those with an advanced stage of disease with an unfavorable prognosis or no known cure.
- Often these encounters will be emotionally charged and require a great deal of empathy and compassion for the patient and his or her loved ones.

Patients with Special Health Care Needs

FINANCIAL CHALLENGES

- Treat the patient
- Not the financial condition the patient is in

- While examining the patient's back, you notice that he has a sacral pressure sore. The patient states he did not know that it was there. He is now complaining of a headache that he rates a 7 of 10.



- Physical challenges
- Developmental challenges
- Pathological challenges
- Other challenges