

CARES CONFERENCE 2024

*Healthcare Collaboration: The Desperate Need to Support
Older and Vulnerable Adults Across Systems Presents*

THE IMPACT OF TRAUMA ON OLDER AND VULNERABLE ADULTS

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NECESSARY SLIDE, UNFORTUNATELY

- YOUR PROFESSIONAL RESPONSIBILITY TO
- Be curious. While the author brings evidence of the topics discussed, evidence emerges daily
- Seek out, understand, and implement best evidence for your practices
 - For unlicensed professionals, it is your responsibility to work in TEAMS, and consult with licensed professionals about the medical contributions to the situation before final determinations related to an older person

Finally, I assume no responsibility for your interpretation of the information provided here; if you don't have full understanding, please ASK!

ASSUMPTIONS ABOUT THE AUDIENCE

You have a professional responsibility to improve your analytical skills with difficult cases where rape is suspected and the person is elder, regardless of your role on the team

You are looking at photographs of abuse; if you are triggered, I am personally available to provide support to you immediately following the presentation or there are safe rooms for your use

You have working knowledge about anatomical locations and the difficulty in the interpretation of findings

You are discussing issues with persons who have different perspectives; we agree to be tolerant of differing views AND be kind in our responses

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TYPES OF ABUSE IS SUSPECTED

- Chicago Health and Aging Project (CHAP), 1993-1995
 - Designed to identify risk factors for Alzheimer disease and common chronic co-morbidities in the elderly,
 - Elder Abuse (sexual abuse, emotional abuse, confinement, caregiver neglect, deprivation, and financial exploitation)

Bienias, J. L., Beckett, L. A., Bennett, D. A., Wilson, R. S., & Evans, D. A. (2003). Design of the Chicago Health and Aging Project (CHAP). *Journal of Alzheimer's disease: JAD*, 5 (5), 349–355. <https://doi.org/10.3233/jad-2003-5501>

FINANCIAL ABUSE

- The fraudulent or otherwise illegal, unauthorized, or improper act or process of an individual, including a caregiver or fiduciary
- They use the resources of an older individual for monetary or personal benefit, profit, or gain
- Results in depriving an older individual of rightful access to, or use of, benefits, resources, belongings, or assets

WHO FINANCIALLY ABUSES AN OLDER PERSON?

- Often someone close to the older person
 - Family members
 - Caretakers
 - Neighbors
 - Friends and acquaintances
- Businesses
 - Attorneys
 - Banks and other financial institutions
 - Health care providers & institutions

OTHER TYPES OF FINANCIAL ABUSE

- Lotteries and sweepstakes
- Imposters
 - Law enforcement
 - Utility representative
 - Home repair
- Technology scams
 - Tax evasion
 - Phishing
- Predatory lenders
 - Investments
 - Identity
- Caretakers, friends, family
 - POA – Power of Attorney
 - Bank Cards & Checks
 - Threats of violence
 - Withholding care

Problems with financial caregivers

•If you suspect that a Social Security representative payee is misusing your loved one's Social Security benefits, [contact the local Social Security office](#) or call the Social Security Administration at 800-772-1213.

•If you suspect that a fiduciary appointed by the Department of Veterans Affairs (VA) is misusing your loved one's benefits, [contact the VA](#) .

•If the situation involved a scam, [report it to the Federal Trade Commission \(FTC\)](#) .

•If the scam used the U.S. mail, [report it online to the U.S. Postal Inspection Service \(USPIS\)](#) or call 877-876-2455.

If you suspect that a guardian or conservator is misusing your loved one's money or property, contact the court that appointed the guardian or conservator. Most courts have procedures for receiving and investigating complaints.

IMPACT OF FINANCIAL ABUSE OF OLDER PERSONS

- A loss of trust and an increased skepticism of everyone, even trustworthy friends and family members
- Loss of a residence, car or utilities due to inability to make payments
- Dependency on government assistance

ADOPTION OF BEHAVIORS TO MINIMIZE VAGAL NERVE ACTIVATION

- Feelings of depression, fear, shame, anger and other negative emotions
- SUICIDE IDEATION
- Alcoholism or other risky and destructive behavior
- Depleted physical health due to stress or the inability to afford proper care or nutrition

PSYCHOLOGICAL ABUSE

- Most common type of abuse (Incidence=54.1%)
- Difficult to assess – no clear evidence or assessment criteria
- Effect: mental anguish and depression, leads to isolation, feelings of low self-esteem, and psychological pain
- Types: threats, humiliation, fear, manipulation, or other cruel conduct

<https://www.apa.org/topics/aging-older-adults/elder-abuse>

PSYCHOLOGICAL ABUSE EXAMPLES

- Harassment, scolding, insults, denigration, and stalking or denying or creating long waits for food, medication, heat, or basic care
- Oppressive atmosphere include placing the individual's walker, cane, glasses, dentures, or other necessary items out of reach or in inaccessible locations
- Interfering with decision making, making false accusations, and controlling the individual's freedom can effectively destabilize the elder

WHO INVESTIGATES IN HOSPITALS & HEALTH CARE SYSTEMS?

- Risk Management
- Quality Management Services
- Patient Safety Department
- Compliance Department
- Accreditation Department
- Human Resources
- Medical Staff Services
- Forensic Nurses

WHO IS ON THE HOSPICE TEAM?

- Physicians
- Registered Nurses
- Home Health Aide
- Social Worker
- Chaplain
- Therapists
- Volunteer

HEALTH CARE PROVIDER ROLE

- One small piece of the investigation
- Mission of HCP is to serve through implementation of licensed responsibilities, e.g., ADPIE, for the purpose of protecting the life, health, and wellbeing of the older patient
 - Use trauma informed and person-centered care environments
 - Collaborate with community resources to ensure successful transition to the community
 - Ethically execute legislation for the protection of the older persons' liberty

IF ABUSE IS SUSPECTED

- Higher level of violence
 - Elder sexual assault (associated with more physically violent acts)
- Other common non-genital injuries
 - Subdural hemorrhage secondary to head trauma
 - Eye, nose and mouth injuries (likely non-accidental)
 - Contusions and lacerations of lips, cheeks, and soft palate
 - Facial fractures (falls)
 - Alopecia with evidence of scalp hemorrhage (hair pulling)
 - Bruising/skin tears/friction burns (restraints, pulling)

DELIVERABLES IN RN ASSESSMENT OF ABUSE

- Oral History from Witness
 - Patient may not be able to tell you what happened
 - Any other report is hearsay without diagnostic exception
 - Use family members as informers – healthy suspicion
- Medications – may come from care provider/provider record; expect omissions!
- Head to Toe Physical Assessment (complex) with full Laboratory panel, and Mental Health screening status for capacity (not legal competence)
 - Consent v Assent AND Competence (legal) v Capacity (social)
- Follow evidence collection principles
 - Photography & Measurement
- Document findings – NOT DIAGNOSTIC, NO opinion or medical consistency of findings – each case is unique!
 - Objective, descriptive, include palpation findings

PERCEPTION OF THE ELDERLY

- Health
- Financial
- Social interaction
- Cognitive status
- Living situation
- Physical abilities
- Physical relationships



SENSES

- Affected senses include... all 5!

COMMUNICATING WITH OLDER PERSONS

- Not all older persons are “hard of hearing”
- May be more sensitive to loud speech
- ASK about hearing
 - Hearing aids
 - Sensitivity to loud speech
- Unable to track source of sound

COMMUNICATING WITH OLDER PERSONS

- Eliminate background noise, radio/TV
- Face the person who may lip-read
 - Check for wax buildup
- Neural activity decreases with hearing loss
 - Reduces grey matter volume
 - Document last hearing test

VISION WITH OLDER PERSONS

- Cataracts

- Lens begins to cloud or yellow (sun exposure)

- Presbyopia

- Begins at around 40

- Perception

- Depth and perception of distance diminish
- Peripheral vision decreases at 45 and worsens after 65

- Deficiencies

- 75% older women
- 50% older men

VISION WITH OLDER PERSONS

- Larger letters for inability to focus
- Sensitivity to light and glare
- Difficulty adapting to low light
- Difficulty with depth perception
- Fewer tears results in irritation and tearing

COMMUNICATING WITH VISUALLY IMPAIRED

- For written materials - Use LARGE letters
- Use uncomplicated layouts
- Avoid colors from the blue end of the spectrum
- Allow time for light adjustment
- Increase light levels without glare
- When asking estimates of distance, use concrete examples such as car lengths rather than inches, feet, yards, etc.

UNDERSTANDING TASTE AFTER 50

- Results in loss of appetite, weight loss, poor nutrition, decreased thirst, weakened immunity, and even death
- Eating may no longer be a positive or pleasurable experience
- Denture or tooth loss issues, document last dentist visit
- Dehydration:
 - Confusion
 - Difficulty walking
 - Dizziness or headaches
 - Dry mouth
 - Sunken eyes
 - Inability to sweat or produce tears
 - Rapid heart rate
 - Low blood pressure/sugars
 - Smaller portions and slower digestion
 - Concerns for incontinence

OLFACTORY DECLINE IN OLDER PERSONS

- 30% Americans between the ages of 70 and 80 have a problem with their sense of smell
- 1/3 of people over 80 have a problem with their sense of smell
- Women of all ages are generally better at detecting odors than men
- Smell links to taste
- Subtle Indicators:
 - Too much perfume
 - Strong aromas in home
- Significant Indicators:
 - Body odor
 - Urine smell
 - Household garbage/conditions
 - Self-neglect
 - Abuse neglect

TOUCH IN OLDER PERSONS

- Touch less sensitive
- Skin becomes dryer, thinner, less elastic and less supple, sometimes reducing an older person's sensitivity to certain pressure and vibrations
- Change in temperature sensitivity
- Arthritis - The most common chronic condition that causes limited activity in those over 65
- A diminished sense of touch = increased risk of sustaining serious injuries
 - Pressure sores
 - Skin ulcers
 - Heat stroke
 - Burns
 - Hypothermia

COMPLICATING CO-MORBIDITIES

- Chronic or persistent disorder of the mental processes
- Caused by brain disease or injury
- Marked by memory disorders, personality changes, and impaired reasoning

SUMMARY OF AGING CHANGES

- Changes in physiology
- A decline in physiologic reserve can affect the ability to respond and recover from significant injury and insult
- Infection
- Life threatening internal organ dysfunction
- Surgeries
- Injuries
- Sub-clinical disease states
 - Underlying metabolic/endocrine disease
 - Hormonal changes (low estrogen state)
 - Musculoskeletal changes (osteoporosis, muscle atrophy)
 - Underlying cardiovascular disease (MI, stroke etc.)
 - Underlying neurologic disease
 - Underlying cognitive impairment (dementia, delirium)
 - Underlying malignancy

BRAIN CHANGES AS PEOPLE AGE

- Certain parts of the brain shrink, including those important to learning and other complex mental activities
- In certain brain regions, communication between neurons may be less effective
- Blood flow in the brain may decrease
- Inflammation, which occurs when the body responds to an injury or disease, may increase

BEST ASSESSMENTS INCLUDE

- Trauma Informed Care Principles – SAFETY
- Patient Centered Care – it's about them, not us
- Understanding functional decline (balance, strength, hearing, sight, taste)
- Understanding cognition and decline that results in reductions in competency
- Pleasant surroundings
- Don't talk down to the elder
- WAIT for them to respond
- Reassure throughout procedure
- Verbal understanding and rewards
- Normalizing ALL responses

COMMUNICATING WITH THE PATIENT

- When the patient has dementias
 - Take longer to tell what happened
 - Talk to them as an adult with capacity to decline your care
 - Easily distracted
 - Become resistant when fearful
 - Paranoias are common
 - Victimization increases all symptoms

HOW THE AGING BRAIN AFFECTS THINKING

- Slower to find words and recall names
- Problems with multitasking
- Experience mild decreases in the ability to pay attention
- Have larger vocabularies
- Have greater knowledge of the depth of word meaning
Have wisdom from their many years of accumulated knowledge and experiences

COGNITIVE DECLINE INCLUDES

- Memory loss
- Difficulty communicating
- Inability to learn or remember new information
- Difficulty with planning and organizing
- Difficulty with coordination and motor functions
- Personality changes
- Inability to reason
- Inappropriate behavior
- Paranoia
- Agitation
- Hallucinations

CEREBRAL ATROPHY

....

MEMORY LOSS OR COGNITIVE IMPAIRMENT

- Often used interchangeably but reflect different levels of brain deficits
- **Memory** = ability to retrieve or recall information.
- **Cognition** = sum total of all thinking skills
 - Involves memory, executive and visual-spatial judgment, language production and understanding, concentration, and attention

MEMORY LOSS OR COGNITIVE IMPAIRMENT

- Often used interchangeably but reflect different levels of brain deficits
- **Cognitive** impairment
 - Characterized by deficiencies in any singular or multiple cognitive domains
- **Dementia** = an over-arching clinical term
 - Describes a progressive decline from neurodegeneration Includes decline in both cognitive and functional abilities

RISK FOR DEMENTIAS

- Age
 - The strongest known risk factor for dementia is increasing age, with most cases affecting those of 65 years and older
- Family history
 - Those who have parents or siblings with dementia are more likely to develop dementia themselves.
- Race/ethnicity
 - Older African Americans are twice more likely to have dementia than whites. Hispanics 1.5 times more likely to have dementia than whites.
- Poor heart health
 - High blood pressure, high cholesterol, and smoking increase the risk of dementia if not treated properly.
- Traumatic brain injury
 - Head injuries can increase the risk of dementia, especially if they are severe or occur repeatedly.

THE BRAIN-BODY CONNECTION

- In middle age
- HTN
- CVD
- DM

= *increase
dementia*

[National Institute on Aging \(NIA\), Home, 2023](#)

DECLINE INTERFERES WITH...

- Normal social activities
- Occupational activities
- Daily Activities



10 WARNING SIGNS of DEMENTIA

1. Memory loss disrupting daily life
2. Challenges in planning or solving problems
3. Difficulty with familiar tasks
4. Confusion of time and place
5. Trouble understanding images and spatial relationships
6. New problems with words
7. Misplacing or unable to retrace
8. Poor judgement
9. Withdrawal from work or social activities
10. Changes in mood or personality

LET'S TALK ABOUT DEMENTIA

- US Constitution guarantees individual liberty for self-determination
- Capacity (medical)
- Competence (legal)

ABNORMAL COGNITIVE CHANGES

- Repeatedly asking the same questions
- Struggling to follow a list of instructions (e.g. a recipe or driving directions)
- Becoming lost in familiar places or areas
- Difficulty understanding time or place
- Misplacing or losing things often

TYPES OF DEMENTIA

Dementia is an umbrella term for loss of memory and other thinking abilities severe enough to interfere with daily life.

- Alzheimer's
- Vascular
- Lewy body
- Frontotemporal
- Other, including Huntington's
- * **Mixed dementia:** Dementia from more than one cause

DIAGNOSIS OF TYPE OF DEMENTIA

- A healthcare provider performs tests
 - Attention
 - Memory
 - Problem solving
 - Other cognitive abilities
- A physical exam, blood tests, and brain scans like a CT or MRI
 - Determines if there is an underlying cause

Tests listed here are not comprehensive – other symptoms often lead to other tests!

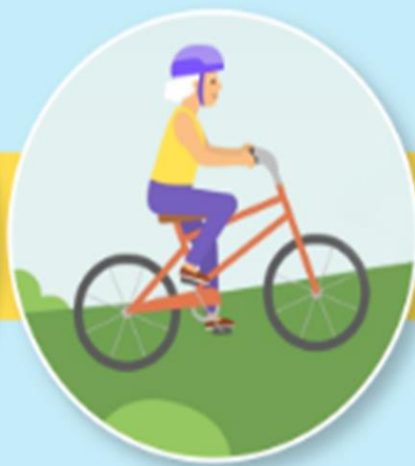
PHYSICAL ACTIVITY IMPACT ON LONG LIFE

The Mental Health Benefits of Exercise and Physical Activity

Have you been feeling down lately? Try exercising to help improve your mood! Exercise can:



Reduce feelings of depression and stress



Enhance your mood and overall emotional well-being



Increase your energy level



Improve sleep

To learn more about the benefits of exercise visit www.nia.nih.gov/exercise.

THE BRAIN-BODY CONNECTION

- Healthy lifestyle factors
 - Physical activity
 - Not smoking
 - Not drinking heavily
 - Mediterranean diet
 - Mental stimulation
 - Others

Follow all = 60% lower risk of Alzheimer's
Follow two or three and lower risk 37%

Follow none... well...

THE SALMON'S LIVED EXPERIENCE

- After sex, they die...

Why?

“Every stress leaves an indelible scar, and the organism pays for its survival after a stressful situation by becoming a little older.”

~ Hans Selye (1936)

Alarm → Resistance → Supercompensation → Exhaustion

NATURE VS. NURTURE

- Life experiences influence brain maturation, as well as how the mind achieves mental health.
- Countless studies have been able to demonstrate that nature depends on nurture
- Every interaction we have with others shapes the architecture of our brains

- This is especially true for the developing brain, which doesn't fully develop until approximately age 25 to 29!

GENERAL ADAPTATION SYNDROME (SELYE, 1936)

Legend

- A. Alarm Phase
- B. Reactive Phase
- C. Supercompensation Phase
- D. Exhaustion or Detraining Phase

BRAIN RESPONSE TO THREAT

- All responses return to homeostasis
 - Freeze – the instantaneous assessment of the danger, briefly unable to fight or run away
 - Flight – After brief freeze, escapes danger
 - Fight – Trying to defeat, remove or contain the danger.
 - Tend or befriend – a theory that suggests the person may survive by a strategy of attending to the wishes of the threat
 - Surrender – after assessment of threat, surrenders to the threat until escape is possible
- Except responses that reset the thermostat and kill the organism (salmon)

NERVOUS SYSTEM

- Central Nervous System
 - Brain
 - Spinal Cord
- Peripheral Nervous System
 - Everywhere else

HPA AXIS

- Physiology of trauma
 - Begins with the reptilian brain
 - Called Vagus nerve
 - Hormone released = adrenalin
 - All other hormones cascade
 - One system is HPA axis
- Cell death occurs when persistent vagal stimulus
- Let's see what else happens

STRESS, MEMORY & BEHAVIOR

- Chronic over-secretion of stress hormones adversely affects brain function, especially MEMORY
 - Damages hippocampus in limbic brain and affects learning
 - Culprit = glucocorticoids
 - Brain cortisol remains
 - Continues to affect the brain cells

STRESS INFLUENCERS IN OLDER PEOPLE

- Examine associations between ACEs, objectively measured physical mobility and cognitive impairment, and functional disability in older community-dwelling adults
- Found older adults with a history of ACEs (>4) are more likely to experience physical and cognitive functional impairment
- ACEs included:
 - Childhood experience of violence/abuse
 - Witnessing of violence
 - Financial insecurity
 - Parental separation
 - Serious illness

Lee et al, 2023

EXPOSURE TO ELDER ABUSE?

- What did it look like?
- Was there a diagnosis?
- Did the diagnosis fall into one of the following maltreatment categories?
 - Neglect
 - Psychological
 - Physical
 - Sexual
 - Financial

Who said?

- “When I’m good, I’m good...
When I’m bad, I’m better.”

80-YEAR-OLD MALE

INJURY

- Public health term – intentional or not
- Synonymous with trauma, but may not be intentional
- Unique language to describe injury but really describing mechanism or response to injury
 - Mechanism (diagnosis that combines history and physical descriptions) - blunt, sharp, shearing, cut
 - Visible response - Inflammation, bridging, scab

MECHANISM OF INJURY REVIEW

- “Alteration in circulation”
 - Continuum of force (physics) on integument or mucous membrane

Blow to surface ←-----or-----→ slow pressure

- Three components of injury for an individual
 - Force (and the amount) based in physics, outside scope for RN
 - Contact with an object
 - Location of disruption in circulation, which determines severity

INTEGUMENT

- Integument Layers
 - Epidermis
 - Dermis
 - Subcutaneous (adipose) tissue

EFFECTS OF AGING

- Decreased dermal thickness
 - Increased bony prominence
- Reduced collagen and elastin
 - Unable to recoil
- Basement membrane flatter
 - Increasing skin tear
- Reduced sensation and metabolism
- Reduction in circulation
- Slower healing
- Skin damage from sun

INFLUENCES ON HEALING PATTERNS

- Wound location and depth
- Age & development of patient
- Presence of chronic disease/infection
- Healing patterns in the individual

THE AGING INTEGUMENTARY SYSTEM

- Aging

Integument thins; Blood flow decreases; Cellular activity decreases;
Repairs occur more slowly

INJURY REVIEW

- When the tissue exceeds its capacity to stretch [when yielding to the object of pressure], the tissue will tear (Speck, 1988)
- Injury will occur micro- and macroscopically
- Initial injury severity may not be detected

HEALING STAGES

INTEGUMENTARY REPAIR

INTEGUMENTARY REPAIR

CLOSED INJURY OVER 6 MONTHS

OPEN INJURY OVER 3 MONTHS

SUSPICIOUS OF ELDER ABUSE? SIGNS INCLUDE

- Unexplained bruises, burns, cuts, or scars
- Lack of basic hygiene, adequate food and water, or clean and appropriate clothing
- Lack of medical aids (glasses, walker, teeth, hearing aid, medications)
- Sunken eyes or unexplained weight loss
- Untreated bedsores
- Dismissive attitude or statements about injuries
- Unreasonably fearful or suspicious
- Lack of interest in social contacts
- Unexplained or uncharacteristic changes in behavior
- Unexplained vaginal or anal bleeding
- Venereal diseases or vaginal infections
- Signs of insufficient care or unpaid bills despite adequate financial resources
- Large withdrawals from bank accounts or other unusual ATM activity

SUMMARY – 2006 MOSQUEDA ET AL STUDY

- **Accidental bruises are in predictable locations**
 - Nearly 90% of the bruises were on the extremities
 - No bruises on neck, ears, genitalia, buttocks, or soles of the feet
 - Subjects mostly know the cause of the bruise if the bruise was on the trunk
- **Medications are known to affect coagulation**
 - Compromised functional elders
 - More likely to have multiple bruises
- **Cannot predict the age of a bruise by its color**
 - Yellow coloration DOES NOT indicate an older bruise
 - 16 bruises were yellow within the first 24 hours

Mosqueda, L., K. Burnight, and S. Liao. Bruising in the Geriatric Population (pdf, 22 pages). Final report to the National Institute of Justice, June 2006, NCJ 214649.

<https://www.ojp.gov/pdffiles1/nij/grants/214649.pdf>

UNINTENTIONAL INJURY LOCATIONS

Mosqueda, L., K. Burnight, and S. Liao. Bruising in the Geriatric Population (pdf, 22 pages). Final report to the National Institute of Justice, June 2006, NCJ 214649.

<https://www.ojp.gov/pdffiles1/nij/grants/214649.pdf>

REPORTING ABUSE - DOMINANT BRUISE COLOR

purple	39 (43.8%)	12 (46.2%)	24 (60.0%)
black	20 (22.5%)	6 (23.1%)	4 (10.0%)
yellow	17 (19.1%)	1 (3.8%)	3 (7.5%)
red	10 (11.2%)	7 (26.9%)	8 (20.0%)
blue	3 (3.4%)	0 (0.0%)	1 (2.5%)

INTENTIONAL INJURY LOCATIONS

Wiglesworth, A., Austin, R., Corona, M., Schneider, D., Liao, S., Gibbs, L., & Mosqueda, L., (2009). Bruising as a Marker of Physical Elder Abuse. *Journal of the American Geriatrics Society*, 57:1191–1196

Ziminski, C. E., Wiglesworth, A., Austin, R., Phillips, L. R., & Mosqueda, L. (2013). Injury Patterns and Causal Mechanisms of Bruising in Physical Elder Abuse. *Journal of Forensic Nursing*, 9(2).

https://journals.lww.com/forensicnursing/fulltext/2013/06000/injury_patterns_and_causal_mechanisms_of_bruising.4.aspx

REPORTING ABUSE - DOMINANT INJURY AREA

Region	Abuse	No Abuse*	P-value†
	n = 48 (%)	n = 68 (%)	
Head and neck	10 (21)	3 (4)	.006
Anterior torso	4 (8)	5 (7)	.846
Posterior torso	7 (15)	2 (3)	.021
Lateral right arm	12 (25)	5 (7)	.008
Right arm, not lateral	13 (27)	25 (37)	.274
Left arm	25 (52)	25 (37)	.101
Right leg	7 (15)	5 (7)	.208
Left leg	8 (17)	9 (13)	.607

KNOWLEDGE OF DEATH PROCESS

- ****Metabolism – shutting down**

Pain → Fever → Coolness → Restless
→ Incontinence → Congestion
→ Urine decreases → Breathing changes
→ Confusion → Sleeping
→ Refusing food and fluids

KNOWLEDGE OF DEATH PROCESS

- When someone is dying, their heartbeat and blood circulation slow down.
- The brain and organs receive less oxygen than they need, and so work less well.
- In the days before death, people often begin to lose control of their breathing.
- It's common for people to be very calm in the hours before they die.

DISTINGUISHING DYING FROM INTENTIONAL INJURY

- Dying – diagnosis
 - Expected to die from disease = palliative care or hospice
 - Early cognitive decline
 - Social support system
 - Beneficiaries with person's death
- Intentional Injury – Comorbidities
 - No expectation of death
 - Early cognitive decline
 - Chaotic support system
 - Beneficiaries with person's death

THE RISK OF DEATH

- The health of the person
- Personality type and coping styles
- The degree of exposure over a lifetime
- Directly affected
 - By injury, illness, loss of a significant other, loss of home, loss of community or other losses
- Support systems

TAKE AWAYS

- The Vagus Nerve is powerful and elementary – reacting to unfamiliar with cascade of harmful hormones that were protective 100 million years ago
- The domino effect is self-regulating, until the stimulus is repetitive with a lifetime of trauma
- Chronic trauma in older persons is co-morbid disease
 - Reversal is possible with exercise, great nutrition, treatment of medical conditions, and calm lifestyle
- Acute and severe maltreatment, unrecognized maltreatment or self-neglect results in death!
 - Explainable with knowledge of the vagal nerve activation

THIS IS FACT...

- Path to cell death is complex for most
- There are only 2 ways to die
 - Heart stops and brain dies
 - Brain dies and heart stops
- Oxygen is everything to a cell
- Diminished O₂ = cell death
- All trauma diminishes O₂ whether blunt or slow chaos

SELF CARE LISTS ABOUT...

Physical Activity

Mental Relaxation

Spiritual Affirmation

Personal Self-Reflection

Economic Stability

Psychological Creativity

TREATING OUR OWN STRESS RESPONSE!

Lifestyle Interventions

- Increase engagement in pleasurable activities
- Reduce exposure to stressors
- Appropriate levels of physical activity/ exercise
- Improve sleep patterns
- Decrease drug and alcohol use
- Increase social support
- Decrease toxic exposure

Psychological Treatments

- Stress management
- Breathing retraining
- Coping skills training
- Biofeedback training
- Past Trauma therapy
- Interpersonal skills training
- Meditation

Treating HPA Dysfunction (high or low stress response)

Nutritional Treatments

- Improve diet
- Increase meal frequency
- Reduce exposure to intolerant/ allergic foods
- Nutritional supplementation and herbal remedies
- Increase anti-inflammatory and high antioxidant foods
- Improve digestive function and treat digestive disturbances

Medical / Physical

- Treat underlying medical/ physical conditions
- Appropriate use of medications
- Identify and decrease inflammatory response
- Treat neurotransmitter imbalances
- Improve liver and detoxification function
- Maintain a healthy weight

SUMMARY

- Injury is a precursor to early death
- In older persons, injury speeds up the process because reserves are short (e.g., broken heart with spousal death)
- Intentional injury exhausts the reserves (emotional, neglect, physical, or sexual assaults) and is elder abuse

THANK YOU FOR WHAT YOU DO EVERY DAY!

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