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Managing Agitation and Aggressive Behaviors in People with Dementia:
Non-Pharmacological Approaches

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Overview

- Definition of Agitation and Aggression
- Triggers of Aggression
- Behavioral Interventions for Aggression
- Behavioral vs Pharmacological Interventions for Aggression
- Resources

Aggression and Agitation

Learning Goals and Objectives

- Learners will be able to define agitation vs aggression
- Learners will be able to name the major area(s) of the brain implicated in agitation and aggression
- Learners will be able to name internal and external triggers of agitation and aggression
- Learners will be able to discuss how to develop a behavioral plan to prevent or reduce aggression

Consensus Statement: Agitation

- Consensus definition of the International Psychogeriatric Association:

  a) Occurring in patients with a cognitive impairment or dementia syndrome

  b) Exhibiting behavior consistent with emotional distress

  c) Manifesting excessive motor activity, verbal aggression, or physical aggression

  d) Evidencing behaviors severe enough to cause excess disability and not solely attributable to another disorder or a suboptimal care condition

Cummings, J., et al., (2015). *International Psychogeriatrics,* 2015:*27*(1), 7-17.

Aggression

- Aggression is a form of agitation
  - Physically (e.g., physically threatening or aggressive behavior toward others, destroying property, etc.)
  - Verbal (e.g., arguing, irritability or complaining, and verbal threats).
  - Psychosis symptoms (e.g., seeing, hearing or sensing distressing people or things that are not real, and incorrect or distressing beliefs).
  - Overreacting to a situation.
  - Repetitive vocalizations, pleas for help, pacing and wandering are not aggression.

Cummings J, et al. *Int Psychogeriatrics.* (2015) 27:7–17. Carrarini C et al., Front Neurol. 2021 Apr 16;12:644317. Torii K, et al., *Psychogeriatrics.* 2011;**11**(4):212–220.

Prevalence of Agitation and Aggression in Dementia

- Agitation occurs in 20 – 45% of people with mild dementia; up to 90% in people with advanced stage dementia.
- Agitation may occur before dementia diagnosis, especially with personality change
- Prevalence of agitation by disorder:
  - 30 to 50% in AD
  - 30% in dementia with Lewy bodies during REM sleep
  - 40% in frontotemporal dementia and in vascular dementia.

Senanaronga V, et al. Dement Geriatr Cogn Disord. (2003) 17:14–20; Anor CJ, et al., Neurodegener Dis. (2017) 17:127–34. Pinquart & Sorensen 2008; Messinger-Rapport et al 2008; Dinniss S. et al. Behav Sci Law 2007;

Reactive vs Proactive Aggression

- Reactive aggression is caused by lack of understanding, pain, unmet needs, poor communication with caregivers leading to rejection of care.
- Proactive aggression could be caused by a psychopathic personality, hallucinations or delusions, and other determinants.
- Why is the distinction important?
  - Reactive and proactive aggression may respond to different treatment strategies.

Volicer L. J Geriatr Psychiatry Neurol. 2021 May;34(3):243-247.

Consequences of Aggression

- Upsetting to the patient, danger to self
- Harm, engenders anger and resentment in others.
- A major source of stress in paid and unpaid caregivers
- Results in premature nursing home placement and expulsion from residential facilities
- Medication administered

Wharton and Ford J Gerontol Soc Work. 2014;57(5):460-77

Pathophysiology of Agitation

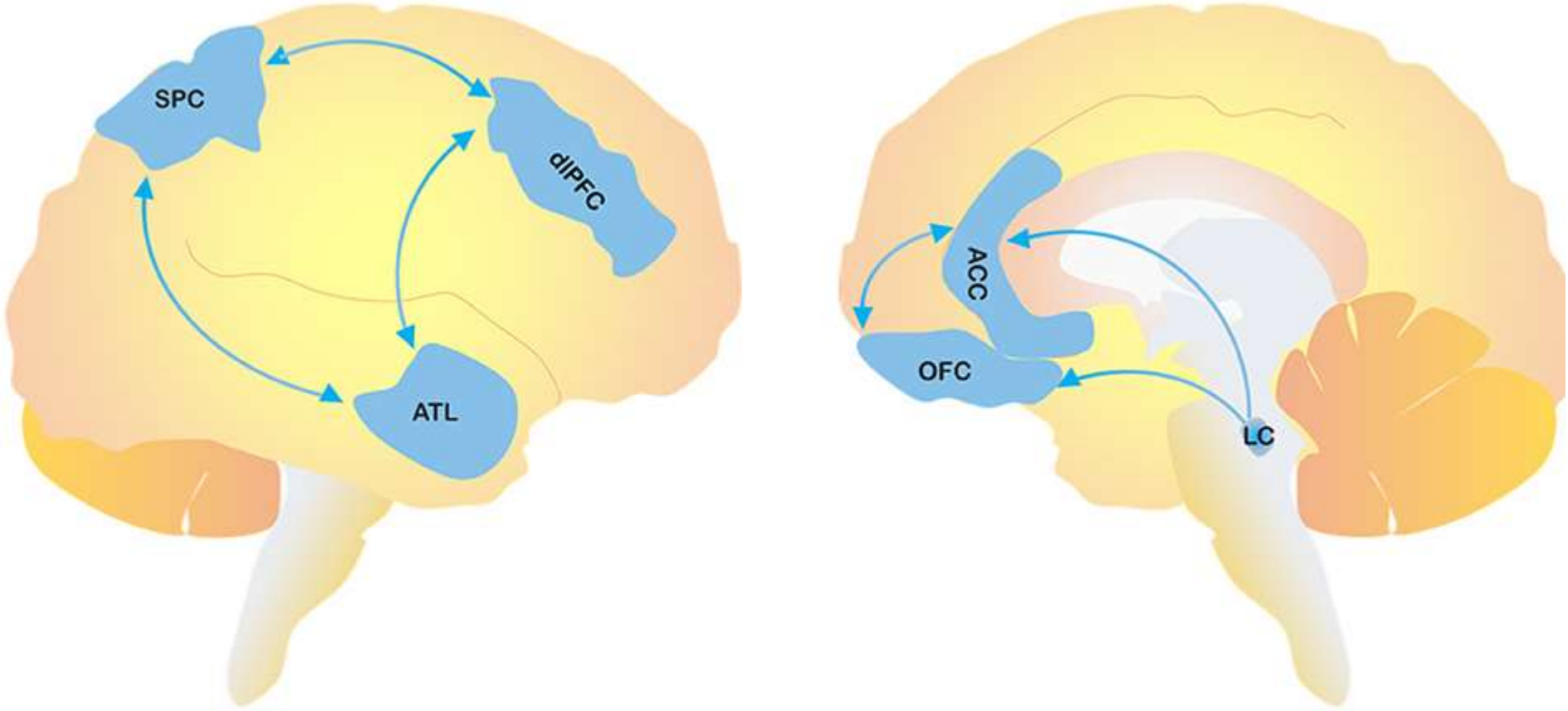
- Its Complicated

Agitation in Alzheimer's Disease

- Neuroimaging evidence of dysfunction in 'agitation circuits' in people with AD.
  - Frontal cortex, anterior cingulate cortex, orbitofrontal cortex, amygdala and insula regions
  - Frontal lobe or fronto-subcortical dysfunction results in aggression, disinhibition and reduced regulation of emotion.
- Multiple Neurotransmitter systems involved:
  - Dopamine preservation in the context of serotonin and cholinergic deficits.
  - Noradrenergic overcompensation
  - GABA implicated

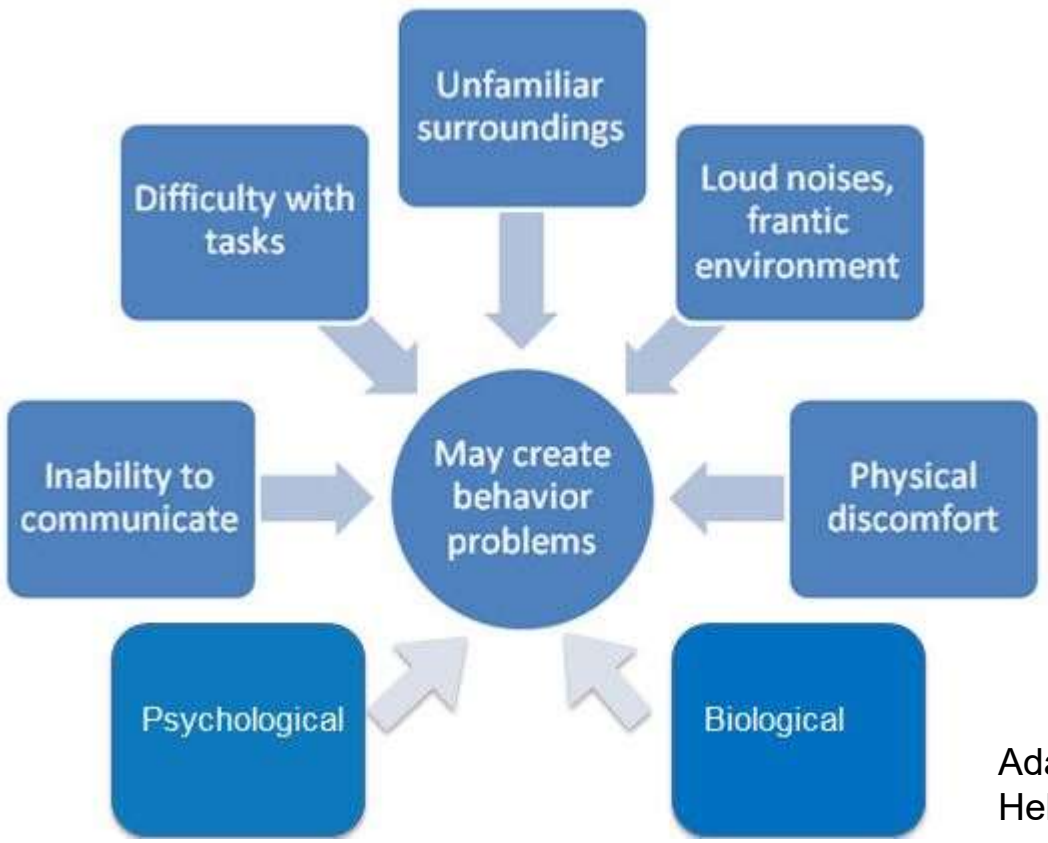
Liu K, et al., Ageing Research Reviews, 2018:43:99-107. Rosenberg PB Mol. Aspects Med., 43–44 (2015), pp. 25-37

Interconnection of Cerebral Areas Involved in Agitation



SPC, superior parietal cortex; dlPFC, dorsolateral pre-frontal cortex; ATL, anterior temporal lobe; OFC, orbitofrontal cortex; ACC, anterior cingulate cortex; LC, locus coeruleus.

Triggers (Causes) of Problem Behaviors



Adapted from Helpguide.org

Psychiatric Triggers and Interventions

- Depression and mania.
- Anger, frustration, feeling overwhelmed by difficult task.
- Paranoia/suspiciousness--"My daughter is trying to poison me"…"… "My husband is cheating on me".
- Exacerbation of prior personality and behaviors.
- Treatment:
  - Treat psychiatric problems.
  - Change communication styles—short and simple sentences, lower demands on patient, reassure.

Cipriani et al., 2015; Wharton and Ford 2014

Environmental Triggers and Interventions

- Uncomfortable, chaotic or loud environment.
  - Temperature, hunger and thirst.
  - People coming and going, violent television shows.
- In residential facilities, roommates are disruptive, wandering.
- Change in environment, living situation or caregivers.
- Treatment:
  - Change behavior—be patient, don't show anger, slow down.
  - Adjust the environment—quiet, temperature, light.
  - Caregivers wear name tags and scrubs.
  - Surround by familiar objects in environment.

Cipriani et al., 2015; Wharton and Ford 2014

Frustration

- Simplify tasks
- Simplify instructions
- Find new things to do that are easier

Medical or Biological Triggers

- Delirium
- Pain, constipation
- REM Sleep Behavioral Disorder (RBD) (Lewy Body Dementia)
- Medications and medication interactions:
  - Benzodiazepines (e.g. Ativan, Valium) can be disinhibiting.
  - Increase of Dopamine can cause aggression in Parkinson's disease.
- Alcohol use
- Treatment:
  - Treat underlying medical condition.
  - Medication reconciliation and eliminate alcohol.
  - Adjust sleeping arrangements.

Cipriani et al., 2015; Wharton and Ford 2014

The Caregiver as a Trigger of Aggression

- Patient does not recognize the caregiver.
- Perceives care as a threat (e.g. hygiene).
- Caregiver's attitude is upsetting to patient.
  - Confrontational, punishing, impatient, critical, reactive
- Unresolved issues between caregiver and patient.
- Gender of caregiver and sometimes a specific person is a trigger.
- Treatment:
  - Caregiver identifies self, explains what's next, reassures, calm tone, patient.
  - Consider change in personnel.

Cipriani et al., 2015; Wharton and Ford 2014

Don’t Argue, Criticize or Escalate

- Don’t remind someone that they have a memory problem and don’t test their memory
  - Don’t say “I already told you that”
- Use honey instead of vinegar
  - “Look at the calendar on the wall…see, there’s our schedule for today”

Enhance Communication

- People who cannot express themselves verbally or understand what is happening may lash out.
- Assess for hearing and vision problems, apraxia, aphasia.
- Is there a language barrier? Is there a cultural barrier? Is the environment unfamiliar?

Enhance Communication

- Identify yourself and why you are there.
- Give step-by-step, simple explanations
- Reassure; gentle touch can be reassuring
- Be physically at their eye-level, make eye contact.
- Listen
- Be mindful of people's dignity

Enhance Communication

- What are your facial expression and body language saying?
- Limit choices for patient. Ask about specific wants or needs.
  - "Do you want a sandwich?" "Would you like a glass of water?"
- Keep communications short and simple.
  - Use one step commands.
  - Tell people what you are going to do next.

Provide Cues for Orientation

- Large digital clocks
- Light the home properly (reduce shadows)
- Close drapes at night
- Central white board or calendar
- Daily planner
- Caregivers wear name tag and scrubs to delineate boundaries

Put Safety First

- Don’t confront or try to reason with angry behavior.
  - The person with dementia cannot reflect on their unacceptable behavior and cannot learn to control it.
- Don’t initiate physical contact during the angry outburst.
  - Physical contact triggers physical violence in the patient.
- Safety first:
  - Remove guns and other weapons from the home.
  - Lock up sharp objects and medications.
  - Leave if necessary

Distraction is Your Friend

- Activities are important for reducing the likelihood of aggression
  - Exercise and expend energy through activities, exercise.
  - Provide structure with a daily schedule or try Adult Day Care.

- Distract and redirect patients who become irritated or angry.
  - Change the subject.
  - Play soft or pleasant music.
  - Offer snacks.
  - Reminisce, view photo albums.
  - Go for a walk.

Create a Familiar, Interesting and Relaxing Environment

- Play favorite music in the background
- Have pictures, familiar objects present as reminders
- Have old movies on hand
- Provide calming objects and entertainment
  - Stuffed animals and soft objects
  - Covered aquariums
  - Bird feeders near windows

Chill Out, Time Out, Take a Break

- Time out—leave for a few minutes and come back.
- Ignore the behavior but not the individual.
  - If a patient swears at you, first ignore it and see what happens. Immediately looking shocked might reinforce the swearing.
- Address what someone is feeling and reassure
  - “I can see you are scared, don’t worry, I’m here to help”

Don’t Take It Personally

- Scenario: Your mother says you are the worst daughter/son in the world.
  - Don’t take it personally. Yes, it hurts but behaviors are not directed at you personally, it’s the disease.
  - Keep your cool.
    - People with dementia read your emotions and demeanor.

Devise a Behavior Modification Plan to Reduce Problem Behaviors

Basic Principles to Reducing Aggression

- Goal: Reduce or avoid the behavior. Total elimination may not be possible.
- Identify what causes or "triggers" the behavior.
  - What's the situation—who's there, time of day,
  - What happens right before a behavior?
  - What happens after the behavior?
- Develop the intervention plan and try it.
- Trial and error

Behavior Log

Behavior: (e.g., wandering, pacing, cursing, hitting, isolation, etc.)
What happened right **before** the behavior? Who's involved?: (certain staff members, another patient, gender of others involved) When?: (time of day, situation)
Consequence of behavior (e.g., you look annoyed, soothe patient, staff or other person leaves room):

Scenario

- Caregiver says: “time for your medication” and Loved one says “get the hell out of here”. Caregiver reacts by looking frustrated, and storms out.
- Trigger: “Time for your medication” and Reinforcer is “leaving”.
- Solution(s).
  - Approach calmy and from the side, sit next to patient.
  - Provide a “therapeutic fib”: “Hi Dad, Dr. Williams, your cardiologist, wants you to take this medication to keep your heart healthy” .
  - Crush medication and put it in apple sauce, only give necessary meds on difficult days.

Aggression During Personal Care

- Aggression often centers around bathing, toileting, dressing
- People with dementia think they already bathed or do not appreciate the need for bathing any longer.
- Dignity and modesty are important, reliving trauma
- Bathroom is scary, unappealing or unfamiliar environment
- Afraid of slipping or falling

Managing or Avoiding Aggression During Personal Care

- Use less threatening words
  - "Let's get clean"; "time for your spa treatment"
- Offer a reward
  - "Let's get clean and then have a snack."
- Have nice atmosphere in bathroom
  - Scents, lighting, décor, temperature
- Have them help as much as possible when undressing and bathing
  - Use hand-held shower head
- Modesty: Cover with a towel during bathing and say what you are going to do, one step at a time
- Have proper safety equipment, such as Shower chairs, grab bars.
- Be flexible on the time of day for dressing, bathing.
- Reduce bathing frequency, with sponge baths in between showers.

Inappropriate Sexual Behavior (ISB)

- **Brain dysfunction and Illness**
  - Brain lesions in frontal lobes, parietal lobes and caudate
  - Delirium, pain, constipation
- **Social Factors**
  - Lack of usual sexual partner(s)
  - Lack of privacy
  - Understimulating or unfamiliar environment
  - Misinterpretation of cues seen on television or in (usually) opposite-gender caregivers
- **Psychological Factors**
  - Mania and depression may increase sexual interest
  - Premorbid patterns of sexual activity and interest, past history of sexual aggression
- **Alcohol and Medications disinhibit**

Management of ISB

- **Educate and counsel patient in private**
  - Respectful; discuss what's going on, how the behavior affects others.
  - Provide specific suggestions
- **Redirect sexual behavior**
  - Keep patient busy
- **Increase socialization**
- **Removal to a private area for masturbation**
- **Use same-sex caregivers**
- **Patient wears clothing that fastens in back.**
- **Be aware of where you are standing or bending.**
- **Treat depression if present.**
- **Sexual partners can be an ethical issue**
  - Do both partners have capacity to consent?
  - Safety (STD's, changing one's mind)
- **Always let paid caregivers know about ISB and discuss how this affects them**

Suicide and Homicide

- Caregivers
- Patients

Suicidal Ideation (SI), Risk, and Attempts in Patients with Dementia

- **Rare; Not well studied; mostly case reports**
- **Prevalence of attempts range from 4.7% to 11.7%**
- **SI may be expected shortly after diagnosis in patients with early stage dementia**
- **As dementia progresses, SI may be due to changes in judgment, frontal lobe functions, neurotransmitter function and presence of delusions**
- **Profile for increased suicide risk in dementia patients (one study)**
  - Male sex, highly educated and professional, mild depressive symptoms occur post-diagnosis, insight remains, suicidal thoughts present.

Barak Y, Aizenberg D. Dement Geriatr Cogn Disord 2002; Tsai CF, Tsai SJ, Yang CH. Int J Geriatr 2007; Lim WS, Rubin EH, Coats M et al. Alzheimer Dis Assoc Disord 2005; Purandare N, Voshaar RC, Rodway C et al. Br J Psychiatry 2009.Cipriani et al., 2015

Suicide in Caregivers of Dementia Patients

- **Family carers may be a high-risk group for suicide.**
- **A survey of 122 (pilot study) and 566 family carers.**
  - **16% to 26% of carers had contemplated suicide in the previous year.**
  - **About 30% said they would likely try it in the future.**
  - **Only 50% talked about suicidal thoughts with someone.**
  - **Carers who contemplated suicide had depression, poorer mental health, lower self-efficacy for using community support services, and greater use of dysfunctional coping strategies than those who had not.**
  - **Increasing age and reasons for living were factors protective against suicidal thoughts.**

Homicide

- **Few controlled studies, most are case studies.**
- **Homicide by patients is uncommon.**
  - Has occurred in the context of delusions, (e.g. spouse is having an affair; violence can be directed at spouse and accused consort).
- **Some risk factors for violence in patients in general include:**
  - Frontal lobe lesions, Pre-existing history of aggression, catastrophic rxns, alcohol abuse
- **Murder-suicides are rare and caregiver is usually the perpetrator**

Cohen Donna. J Ment Health Aging 2004; 10: 83–86; Cipriani et al. 2015, Mendez et al., 2010, 2012. Cohen D, et al., Am J Psychiatry 155:390–6, 1998; Cohen D. Am J Geriatric Psychiatry 13:211–17,2005; Salari S. Clin Interv Aging. 2007;Malphurs J, Eliason, S jaapl 2009

Medications for Aggression and Other Behavioral Problems

General Principles

- Medication is last resort and reserved for when Behaviors put the person at risk of harm to self or others.
  - Not eating due to severe depression.
  - Injurious to self or others (i.e. caregivers).
  - Other interventions have not worked.
- Consider risk vs. benefit.
- Start low, go slow: Use lowest effective dose.
- Be aware of common and serious side-effects.
- Lower the dose or wean off if possible.

Examples of Drugs Classes Used for Managing Behavioral Disturbances

- **Antidepressants for low mood and irritability, compulsive behaviors (including ISB)**
  - SSRI's (e.g. fluoxetine (Prozac); Citalopram (Celexa),
  - Trazodone (Desyrel)
- **Anxiolytics** for anxiety, restlessness, verbally disruptive behavior and resistance:
  - lorazepam (Ativan)
- **Antipsychotic medications** for hallucinations, delusions, aggression, agitation, hostility and uncooperativeness:
  - aripiprazole (Abilify), olanzapine (Zyprexa) ,
  - quetiapine (Seroquel); risperidone (Risperdal)
- **Mood stabilizers, anti-seizure medications**
  - Carbamazepine (Tegretol)
- **Acetylcholinesterase Inhibitors**
  - Donepezil (Aricept), Rivastigmine (Exelon), Galantamine (Razadyne)
  - Not specifically used for aggression
- **Hormone treatment for ISB**

When to Get Help for Aggression

- **If you are a caregiver feeling a few or more of these symptoms—GET HELP**
  - Depressed, feeling alone, isolated, over burdened, or angry
  - Insomnia
  - Have thoughts of hurting yourself or the person you are caring for
- **If you fear for your own safety or the safety of someone in your household**

Where to Get Help for Aggression

- **UCLA caregiver education videos. https://www.uclahealth.org/dementia/caregiver-education-videos**
- **24 Hour Alzheimer's Caregiver Helpline - (855) 476-7600**
- **Adult Protective Services and Child Protective Services**
- **Suicide hotline**
- **Consult the patient's doctor and / or consult your doctor**
- **Psychotherapy**
- **Caregiver support group for depression, gaining skills, venting**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