Defining Death

• In the past several decades, defining death has become more complex

Brain death -- the neurological definition, when all electrical activity of the brain has ceased for a specified period

— individual whose higher cortical areas have died may continue breathing and have a heartbeat

(Kendall & others, 2007)
**Figure 1** Test for oculocephalic reflex response (doll's eye phenomenon). A. Normal response, eyes turn together to side opposite from turn of head. B. Abnormal response, eyes do not turn to conjugate margin. C. Absent response, eyes do not turn as position of head is changed.

*Reproduced from Kurz, *with permission.*

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**Table 5: Confirmatory tests of brain death**

<table>
<thead>
<tr>
<th>Test</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerebral angiography</td>
<td>No intracerebral filling at level of carotid bifurcation or circle of Willis</td>
</tr>
<tr>
<td></td>
<td>Patent external carotid circulation</td>
</tr>
<tr>
<td>Electroencephalography</td>
<td>No electrical activity during a period of at least 30 minutes of recording</td>
</tr>
<tr>
<td>Transcranial Doppler sonography</td>
<td>No diastolic or reverberating flow</td>
</tr>
<tr>
<td></td>
<td>Systole-only or retrograde diastolic flow</td>
</tr>
<tr>
<td></td>
<td>Small systolic peaks in early systole</td>
</tr>
<tr>
<td>Somatosensory and brain stem auditory evoked potentials testing</td>
<td>No responses</td>
</tr>
<tr>
<td>Technetium Tc 99m brain scan (cerebral blood flow scan)</td>
<td>No uptake of radionuclide in brain parenchyma (&quot;hollow skull phenomenon&quot;)</td>
</tr>
<tr>
<td>Magnetic resonance imaging</td>
<td>Not yet determined</td>
</tr>
</tbody>
</table>
Advanced Directive

• **Living will** -- document filed while the individual can still think clearly which expresses the person’s desires regarding extraordinary medical procedures that may or may not be used to sustain life
  – advance directive

• All 50 states now accept advance directives as reflecting an individual’s wishes
**Euthanasia**

- **Euthanasia** -- painlessly ending lives of individuals who are suffering from an incurable disease or severe disability
  - mercy killing
  - two types:
    - active -- when death is deliberately induced
      - assisted suicide
    - passive -- when a person is allowed to die by withholding available treatment

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**Thursday, 20 March 2008**

**French euthanasia seeker Chantal Sebire dies**

French woman Chantal Sebire who has been recently in the news because of her attempts to get legal permission for doctors to aid her death has died at her home near Dijon aged 52.

The cause of Chantal Sebire’s death is, as yet, unknown.

Former teacher Chantal Sebire had an incurable cancerous growth in the nasal cavity known as an esthesioneuroblastoma and she had failed to get her plea for euthanasia accepted.

Chantal Sebire had asked a French court to allow doctors to help her die because her tumour had left her blind, disfigured and in intense pain, however, whilst the court agreed that her condition might “inspire compassion” it ruled that the law did not allow assisted suicide.

Chantal Sebire had pointed out that she could no longer see properly, taste or smell and she described how children ran away from her in the street because of her appearance.

Only 200 cases of esthesioneuroblastoma have been recorded worldwide in the last 20 years.
End-of-life Care

• End-of-life care should include respect for the goals, preferences, and choices of the patient and his or her family
  – hospice -- program committed to making the end of life as free from pain, anxiety, and depression as possible
  – palliative care -- reducing pain and suffering and helping individuals die with dignity

(International Work Group on Death, Dying and Bereavement & others, 2006)
(Rodriquez, Rarnato & Arnold, 2007)

Circumstances of Death

• 200 years ago, many children and young adults died
  – average life expectancy was 47 years
• In 1900, most people died at home, cared for by family
• Today, death occurs most often among older adults
  – average life expectancy has increased to 78
• 80% of deaths occur in institutions and hospitals with professional caregivers

(Lamb, 2003) (U.S. Census Bureau, 2006)
Cultural Variations

- In most societies, death is not viewed as the end of existence; the spirit is believed to live on
- Individuals are more conscious of death in times of war, famine, and plague
  - Most societies have had philosophical or religious beliefs about death and most have a ritual that deals with death

(Kobar, Youngblut & Brooten, 2006) (Hedayat, 2006)

Kubler-Ross’ Stages of Dying

- Dr. Elisabeth Kübler-Ross, psychiatrist and prolific author of the ground-breaking book, On Death and Dying, coined the now famous "5 Stages of Grief." Her work challenged the medical profession to change its view of dying patients. This advanced many important concepts such as living wills, home health care, and helping patients to die with dignity and respect, which is now hospice.

- Five stages
  - denial and isolation
  - anger
  - bargaining
  - depression
  - acceptance

(Kubler-Ross, 1972)
Denial: "It can't be happening."

Anger: "Why me? It's not fair."

Bargaining: "Just let me live to see my children graduate."

Depression: "I'm so sad, why bother with anything?"

Acceptance: "It's going to be OK."

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Evaluation of Kubler-Ross

- 5-stage sequence has not been supported by research findings
  - Stages did not account for individual circumstances of patient and support systems
  - However, she did much to call attention to the issues of quality of life and coping with dying

(Kastenbaum, 2007)
Coping with Death and Loss

• It is best for dying persons and their family members to know that death is immanent and a reality
  – individuals can close life with their own ideas about proper dying
  – they can complete some projects and plans and can make arrangements for funeral and for survivors
  – can reminisce
  – can experience physical sensations and medical procedures

(Banja, 2005) (Kalish, 1981)

Effective Strategies for Communicating with a Dying Person

• Establish presence at same eye level and don’t be afraid to touch the dying person
• Eliminate distraction, including excessive small talk
• Keep visits short with frail individuals
• Don’t prescribe or deny feelings of acceptance
• Allow and encourage expressions of feeling
• Ask the person what the expected outcome of the illness is; discuss alternatives and unfinished business
• Ask if there is anyone he or she would like to see or have someone contact
• Encourage reminiscences
• Talk to the individual when he or she wishes to talk
• Express your regard for the dying individual, don’t be afraid to express love

Dimensions of Grief

• Grief -- emotional numbness, disbelief, separation anxiety, despair, sadness, and loneliness that accompany the loss of someone we love
• Many dimensions
  – pining or yearning
  – separation anxiety
  – despair and sadness
  – hopelessness and defeat

(Maciejewski & others, 2007)
Dual-Process Model

- Loss-oriented stressors
- Restoration-oriented stressors
- Effective coping with bereavement often involves oscillation between coping with loss and coping with restoration
- Coping with loss and engaging restoration can be carried on concurrently

(Stroebe, Schut & Stroebe, 2005) (Richardson, 2007)

Coping and Type of Death

- Impact of death is strongly influenced by circumstances under which death occurs
- Sudden, untimely, violent, or traumatic deaths are likely to have more intense and prolonged effects
- Diverse grieving patterns are culturally embedded practices

(Carr, Nesse & Wortman, 2005; Wortman & Boerner, 2007) (Lalande & Bonanno, 2006)
Making Sense of the World

• One beneficial aspect of grieving is that it stimulates many individuals to try to make sense of the world
• When death is caused by accident or disaster, the effort to make sense of it is pursued vigorously
• Bereaved want to put death in a perspective they can understand

(Kalish, 1987)

Losing a Life Partner

• Those left behind by an intimate partner often prefer to suffer profound grief and often endure financial loss, loneliness, increased physical illness, and psychological disorders
• Widows outnumber widowers 5 to 1
• Many widows are lonely
• Bereaved are at higher risk for health problems

(Zisook & Kendler, 2007) (Neimeyer, 2006)
Adjustment to Death of a Spouse

• Optimal adjustment depends on several factors
  – women do better than men because women have better networks of friends and care for themselves psychologically
  – older widows do better than younger widows because death may be more expected
  – widowers are more likely to have better financial resources and more likely to remarry

(Antonucci & others, 2001)

Forms of Mourning

• One decision is to decide what to do with the body
  – burial
  – cremation

• Funeral services
  – more meaningful to religious survivors

• Family and community have important roles

(Hayslip, Edmondson, and Guarnaccia, 1999)