Mental Health Aspects of Diabetes in Elders from Diverse Ethnic Backgrounds

American Indian Elders

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Background

- 5–10 Million indigenous people in the continental United States at the time of first European contact 500 years ago.
- 1900 – Census count of only 237,000 Native Americans due to infectious disease, deprivation, and genocide.
- 1880’s – 1934 Era of suppression and repression of Native American cultures. American Indians (A/I) are confined to “reserved” lands.
- Indian Self-Determination and Education Assistance Act of 1975 and the Indian Health Care Improvement Act of 1976 enacted by Congress.
Influences on Native American Cultures

- Forced Assimilation
- Boarding Schools
- Historical relationship with land bases.
- Unique relationship with the federal government.
- Relocation programs of 1950’s.
Influences on the Older American Indian Cohort

- Did not immigrate from another place
- Many Nations paid for health care, education and social programs, in perpetuity, with ceded land by treaty.
- Tribal affiliation and historical relationship with the federal government.
- World view influenced by unique reality of tribal, familial and spiritual history.
Access to Health Care

- Perception of and reaction to a hostile environment, including:
  - Health care system and providers
  - Diabetes diagnosis
  - Coping with depression
  - Recognition of memory loss

- Complex system of health care delivery:
  - Medicare/Medicaid
  - Indian Health Service
  - Compacting and contracted services
  - Tribal health services
  - Veterans Administration
Demographics

- 62% of American Indians do NOT live on-or-near reservation land.
- The number of older American Indians is expected to nearly double between 2000 and 2020 (Rhoads, 2003), many of whom live in urban areas.
- There are 28 non-governmental and non-tribal programs providing clinical services to American Indians and Alaska Natives in urban areas.
Diabetes Relative Risk

- Over 98% of diabetes in AI/AN, including children, is Type 2 diabetes, and associated with insulin resistance. (Other ethnicities: 10-15% Type 1 and 85-90% Type 2.) (Attico & Pauk, 1998)

  - 4,549 AI men and women ages 45 to 74, on-or-near reservations.
  - Rates of Diabetes from the SHS:
    - Arizona – Men, 65%  Women, 71%
    - Dakotas – Men, 32%  Women, 43%
    - Oklahoma – Men, 36% Women, 41%
Diabetes Relative Risk (cont.)

- Strong Heart Study (cont.)
  - Impaired glucose tolerance was predictive of a high risk of developing diabetes.
  - 4 years later SHS participants with impaired GTT developed diabetes at a rate of 30-50%.
  - Rates of kidney disease and dialysis are much higher than other ethnic populations.
  - Very few AI receive kidney transplants.

(SHS, Data Book, 2003)
AI Diabetes Relative Risk

- One urban study of hypertension in older AI (in the Pacific Northwest) reported that the most frequently reported co-morbid conditions with HBP were:
  - Type 2 diabetes
  - Alcohol Abuse
  - Depression
  - With higher rates for diabetes and depression

- The same study reported that the number of health problems was the most important factor associated with end organ disease screening. (Rhoads, 2003)
AI: Diabetes-Related Death Rate*, 1999

*Per 100,000

- WHITE: 22.8
- AFRICAN AMERICAN: 50.1
- HISPANIC: 33.6
- AI/AN: 50.3
- ASIAN/PI: 18.4
Urban AI Death Rates from Diabetes

- Diabetes is the 5th highest cause of death for AI ages 45-64, and the 4th highest for AI 65 years and older.
- Ages 45-64 death rates from diabetes:
  - All Races – 20.7 (per 100,000)
  - Urban AI – 40.0
- Ages 65 and over, death rates from diabetes:
  - All Races – 117.0 (per 100,000)
  - Urban AI – 162.5

Urban Indian Health Institute, Seattle Indian Health Board, 2004

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Assessment of Diabetes Risk Factors for AI

- Family History of Type 2 diabetes
- Impaired fasting glucose
- Impaired glucose tolerance
- History of gestational diabetes
- History of delivery of a macrocephalic infant (> 9 lbs.)
- Obesity (> 125% of IBW)
- Hypertension
- History of renal disease in parents
- Very high or very low birth weight

(Attico & Pauk, 1998)
Screening blood sugar levels for AI elderly should be done at least every three years, and annually for those at higher risk.

Elders who are overweight and sedentary should have a fasting blood sugar at least annually.

Regular retinal screening for retinopathy is recommended.

Regular screening for kidney disease is recommended.

(SHS, 2003)
AI: Culturally Appropriate Management of Diabetes

- “Now you are a REAL Indian”

- Medications – In the SHS, more males and females with diabetes received oral medication than received insulin, less than 0.5% received both oral medication and insulin, and more women than men received treatment. (SHS, 2003)

- Elderly AI may be resistant to self-monitoring glucose levels due to vision and sensory impairment (especially fingers) and loss of dexterity.
Health education should utilize a “health promotion” approach rather than a “disease model”, and be carefully evaluated for cultural relevance. (Neligh, 1990)

Peer AI educators are being successfully used to provide community education for fitness, wellness programs, weight control programs, indigenous cooking classes and self-management programs.

One-on-one counseling combined with AI group education/discussion seems to be most effective.

The importance of AI counselors, AI peer educators, and AI member groups cannot be overstated
AI: Depression Relative Risk

- Little is known about the mental health status of older AI in Tribal or community populations, and limited research exists for depression in AI. (Manson, Ackerson & Brenneman, 1989; LaFromboise, 1988)

- “Acculturation Stress” resulting from forced acculturation and attempted forced assimilation is hypothesized to be a causative factor in development of depression in older AI. (Kunitz & Levy, 1986; Leighton, 1971; LaFromboise, 1988)

- A strong association is suggested between the burden of medical illness and disability, and depression in rural and urban Indians age 55 years and older. (Lichtenberg, Chapleski, and Youngblade, 1997)
AI: Culturally Appropriate Diagnosis and Assmt. of Depression

- Difficulties in assessment of AI for depression:
  - Prevalence and expression of symptoms of depression in older AI may vary widely depending upon cultural values.
  - Cultural labeling of different emotions is variable.
  - Conceptual language differences.
  - Cultural incongruence with DSM IV criteria for the diagnosis of depression. (Manson, Shore, & Bloom, 1985; Hendrix, 1999)
AI: Culturally Appropriate Diagnosis and Assmt. of Depression

- Depression may be more common in AI women than in AI men. (Baron, et al, 1989)
- A 12-item version of the Center for Epidemiological Studies Depression Scale (CES-D) has been utilized effectively among urban, rural off-reservation, and reservation residing AI aged 55 years and older. (Chapleski, Lamphere, Jankowski, Dwyer, and Lichenberg, 1997)
- The MMPI and Cornell Medical Index have been found to be culturally invalid for use with AI. (Chapleski, et al, 1997)
- The Geriatric Depression Scale (GDS) is widely used, and may be inappropriate for use with older AI, resulting in withdrawal from the relationship by the AI elder. (Hendrix, 2004; Miller, 2001)
Information may be obtained by discussing specific symptoms (for example, loneliness, sleep problems, activities, low energy, sadness, etc.), rather than “depression”. (Kramer, 1991; Hendrix, 2001)

Depression, alcoholism, violence and anxiety may be functional reactions to the real experiences of genocide, oppression, racism, and cultural alienation, and should be treated as cultural Post Traumatic Stress Disorder. (Duran & Duran, 1995)

Depression may be experienced as a spiritual imbalance as well as a physical imbalance, and the services of a healer and/or spiritualist may be required in addition to allopathic medical intervention.

Older AI may be especially resistant to taking antidepressant medication.
AI: Cognitive Loss and Dementia - Relative Risk

- Very little is known.
- Alzheimer’s disease may be less common among AI.
- Diabetes has been linked with depression and functional disability, and other research has linked depression to the eventual development of dementia.
- As the AI population live longer it is anticipated that dementia and memory loss will become more prevalent due to extremely high rates of diabetes, and possibly depression.
- Most likely prevalence will increase in the vascular dementias associated with multi-infarct dementia and stroke.
It is not likely for an older AI to present to a health care provider complaining of “memory loss”.

The most common presenting behaviors of dementia in AI in one study were:
- #1 – “difficulty understanding instructions”
- #2 – “not recognizing people they know”
- 1/3 of the participants exhibited restlessness and agitation all the time. (John, Hennessey, Roy, & Salvini, 1996)

The least common behaviors (same study) were:
- #1 – Wandering/getting lost
- #2 – Dangerous behaviors to self or others.

There is currently no culturally appropriate/congruent instrument to measure cognitive function in AI groups. (Jervis & Manson, 2002)
AI: Culturally Appropriate Treatment & Intervention for Cognitive Loss & Dementia

- Some AI cultures normalize forgetfulness and confusion as part of the aging process.
- Intervention may not be needed or wanted.
- Symptoms of cognitive impairment may be seen and valued as preparation for crossing from this world to the next.
- Many AI families tend to value the interdependence of family and community as much as the autonomy of the individual.
- Some cultural values that affect caregiving and decision-making in the AI family may be:
  - Non-interference
  - Individual freedom
  - Non-directive communication
  - Non-infantilizing of elders

(Hendrix, 2001; Ogrocki, Welsh-Bohmer, & Allen, 1997)
AI: Culturally Appropriate Treatment & Intervention for Cognitive Loss and Dementia

- Interventions should be the result of collaboration between families and health care providers.

- “Caregiver burden” may be culturally unacceptable, but caregiver stress is felt significantly. (Henessey & John, 1996)

- Culturally appropriate caregiver training, respite care programs, and family support programs should be developed by health care systems providing services for older American Indians.
The term “diabetes” is used, and diabetes is considered a “White man’s disease”, partially brought on by commodity foods provided to AI by the federal government upon confinement to reservations.

“‘Big belly societies’ developed as activity decreased and cultural value shifted away from the (more active) warrior societies”.

The first resource an AI elder with newly diagnosed diabetes is likely to turn to is family members and “other Indians with diabetes”.

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A “cure” is not anticipated. “The cure is really the healing and the healing is in the mind”.

Faith in God, spirituality, and religious faith may be used in acceptance of diabetes.

Denial may be used as a coping strategy, “until that doesn’t work anymore”.
AI: Key Informant 
Interview Results, Depression

- It is generally difficult for AI elderly to talk about “depression” or other feelings – not currently a cultural value.
- Depression is talked about as “feeling down”, “feeling blue” or “not feeling good”.
- Depression may be expressed as feeling “overwhelmed”, that they “have no control over their lives”, or they “may develop a meaness”.
- “Older Indian people and younger people go to the elders” and some will “turn to Indian religious leaders” for counseling.
AI: Key Informant Interview Results, Recommendations for Health Care Providers for Care of AI with Depression

- Explain that “others are going through the same thing”.
- Start with indirect approaches (for example, talking about symptoms to draw out and educate).
- Have small groups (6-8 people).
- Education and counseling should include the entire family.
- Counselors should “see where the individual is coming from” and “meet them there” – “the physical and spiritual in transformation”.

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AI: Key Informant Interview
Results, Cognitive Loss and Dementia

- The term “dementia” is not used and not known. There may be a stigma with mental illness misperception.
- Cognitive loss is normalized as “you lose your memory when you get old”.
- Cognitive loss is recognized by AI family members when “elders become confused”, “begin forgetting important events”, “do not recognize relatives” or “forget medications”.

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AI: Key Informant Interview Results, Cognitive Loss and Dementia (cont.)

- Elderly AI with cognitive loss were described as consistently expressing feelings of “fearfulness” or “loneliness”, and that they were not likely to talk about these feelings with “a young person”.

- Family members may approach the issue of memory loss by asking, “Is there something bothering you?”

- There is not much specific knowledge about dementia in the community, and the informants recommended a “non-fear-based” educational approach.