

Frequent Companions: Depression and Diabetes

Ann Bullock, MD

IHS Division of Diabetes
Treatment and Prevention

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Childhood Trauma Predicts Adult Health

- Children born in Helsinki, Finland between 1934-44
- 320 were evacuated abroad during WW II—separated from their parents
 - Average age at evacuation: 4.8 years old
 - Average duration of evacuation: 1.7 years
- 60 years later, compared with children not evacuated, evacuees were much more likely to have:
 - Heart disease (OR 2.0) and hypertension
 - Type 2 Diabetes (OR 1.4)
 - Depressive symptoms (OR 1.7)
- “This study is among the first to show that early life trauma predicts higher prevalence of cardiovascular disease and type 2 diabetes in late adulthood...”

Ann Med 2009;41:66-72, *Am J Epidemiol* 2007;166:1126-33, *Am J Hum Biol* 2008;20:345-51

Diabetes and Depression: Intertwined

- A “bidirectional association”
 - 1/3 of patients with Diabetes will develop Depression
 - Depression doubles the risk of Diabetes
- The prevalence of depression in people with diabetes is higher than in those without diabetes

(Lin, 2010; Pan, 2010)

- Major depression is associated with
 - 25% increased risk of macrovascular complications
 - 36% increased risk of microvascular complications in patients with type 2 diabetes
 - Only *partly* explained by increased A1C (Lin, 2010)
- Large VA study—over 7 year period:
 - Pts with *either* DM or MDD: ~30% ↑ risk of MI
 - Pts with *both* DM and MDD: 82% ↑ risk of MI (Scherrer, 2011)
- Depression increases risk of death *beyond* the risk from diabetes alone (Lin, 2009)
 - And diabetes is associated with a substantial excess of deaths from intentional self-harm(The Emerging Risk Factors Collaboration, 2011)

- Depression is often under-identified and under-treated, especially in minority patients with diabetes (Sorkin, 2011)
 - which can increase mortality (Pan, 2011), morbidity and worsen diabetes control.

- Even depressive symptoms which do *not* meet the diagnostic criteria for depression are associated with nonadherence to important aspects of diabetes self-care (Gonzalez, 2007)
 - and may require different interventions than treatment of clinical depression (Fisher, 2007).

- Effective treatment of depression and diabetes improves them *both*—as well as quality of life and functional outcomes (Ell, 2010; Katon, 2010).

AI/AN People

- Rates of childhood and adult stress and trauma exposures are higher in AI/AN people compared with the general population
 - significantly associated with ↑ risk of having diabetes
(Manson, 2005; Jiang, 2008)
- Depression rates in AI/AN are several times higher than for the general U.S. population
(Singh, 2004)
- Overall rate of depression in people with diabetes was 8.3% in the 2006 Behavioral Risk Factor Surveillance System (BRFSS), but in AI/AN it was 27.8%
(Li, 2008)
- A1C levels are higher in AI/AN patients with diabetes and depression
 - 1.2% higher in Pima study
(Singh, 2004; Sahota, 2008)



“Depression” is messy

- Major Depressive Disorder, minor depression, dysthymia: all forms can impair function and quality of life
 - “Clinically relevant depression” *Clinical Diabetes* 2006;24:79-86
- Often chronic, recurrent
 - Look for this in AI/AN—even though screening asks about “the last 2 weeks”
- Depressive-type symptoms can be caused by medications, medical/psychiatric conditions, life changes/bereavement
- Responses to trauma both past and present
 - Post-traumatic stress responses:
 - PTSD
 - *Depression, Anxiety*
 - “Demoralization” *Kroll, JAMA* 2003;290:667-670

Not All That is Blue is Depression

- **Many medical conditions may cause Depressive symptoms:**
 - sleep apnea, chronic pain, hypothyroidism, anemia, coronary artery disease, congestive heart failure, chronic kidney disease, chronic inflammation, rheumatologic or neurologic disorders, etc.
 - Blood sugar issues:
 - chronic hyperglycemia
 - recurrent blood sugar fluctuations (“roller coaster”)

Why a Depression Best Practice?

- Because depression is a huge problem for our diabetes patients: 1 in 4 likely have it!
- And we want to find and address/treat depression as early as possible
- So we need to be screening for it in all of our patients with diabetes!



Indian Health Diabetes Best Practice: Depression Care

1. Educate staff on depression

--include all staff—it may be the dietician or CNA who the patient talks to

2. Screen all people with diabetes for depression: PHQ-9

3. Treatment—many options

4. Recognize when to refer and how quickly

Key Measures:

1. % of diabetes pts screened for depression in past 12 mos
2. % of diabetes pts w/documentated depression that received treatment for depression in past 12 mos

Depression Screening: PHQ-9

Over the last 2 weeks, how often have you been bothered by any of the following problems?

- Little interest or pleasure in doing things?
- Feeling down, depressed, or hopeless?
- Trouble falling or staying asleep, or sleeping too much
- Feeling tired or having little energy
- Poor appetite or overeating
- Feeling bad about yourself, that you are a failure or have let yourself or your family down
- Trouble concentrating on things, such as reading the newspaper or watching television
- Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual
- Thoughts that you would be better off dead or of hurting yourself in some way

Patient Health Questionnaire: the PHQ-9

- Give orally or on paper
 - Can give all 9 items at once
 - Or start with 2 and give other 7 items if either is +
- Scoring
 - Each item: Likert scale from 0 to 3 (0=Not at all, 1=several days, 2=more than half the days, 3=nearly every day). Add items for a score ranging from 0 to 27.
 - Scores of 0-4 suggest negligible depressive symptoms, 5-9 mild, 10-14 moderate, 15-19 moderately severe, and 20-27 severe
- Helps with depression diagnosis as well as measure of depression severity

(J Gen Intern Med 2001;16:606-613)

 - Remember to rule-out other causes of symptoms besides clinical depression—don't diagnose with PHQ alone!



Depression Treatment

■ Medications

- patients with severe depression are more likely to benefit than those with milder symptoms (Fournier, 2010)

■ Cognitive therapies

- Cognitive behavior therapy (CBT)
- Individual and group psychotherapy
- Solution-focused

■ Dialectical Behavior Therapy (DBT)

- Mindfulness/emotional awareness therapies

■ Trauma-processing therapies

- EMDR (Eye Movement Desensitization and Reprocessing)

■ Activity therapies

- Movement, Art, Equine-assisted, Psychodrama

■ Physical activity—possibly the *best* antidepressant

And...

- Psychoeducation, individual and family
- Coping skills training
- Light therapy
- Support groups/Talking Circles
- 12-step programs
- Intergenerational Grief Programs
 - e.g. White Bison/Wellbriety
- Spiritual support, Traditional Indian Medicine

Offer options for diabetes and depression care

- Group medical visits (Davis, 2008)
- Collaborative care management
 - nurses who provide guideline-based, patient-centered case management of diabetes and depression significantly improve both conditions
NEJM 2010;363:2611-20
- Web-based or online treatment
 - telepsychiatry/telepsychology (van Bastelaar, 2011)
 - case management
 - psychoeducation
 - support groups



Integrative Approaches

- Progressive Muscle Relaxation
- Yoga, Qi Gong, Tai Chi
- Meditation
- Acupuncture
- Massage
- Studies show that:



- decreasing chronic pain can result in better functional and diabetes outcomes
- having a sense of connection with a power greater than oneself is associated with better health outcomes
- emotional coping skills and meditative techniques reduce blood pressure, lipids, etc.

It Isn't Just About Medical Care

- **Psychosocial and socioeconomic factors play large roles in Depression (and Diabetes risk)**
- **Assess needs and link patients with resources**
 - Education (e.g. GED), Literacy programs
 - Food resources: food stamps, commodities
 - Job programs, incl Vocational Rehabilitation
 - Home health, respite services
 - Senior services, incl for socialization
 - Domestic violence shelters
 - Transportation
 - Child Care

Relationships



Soc Sci Med 2006;62:769-78

- **“Collective efficacy”**
 - the willingness of community members to look out for each other and intervene when trouble arises
 - lack of it is associated with obesity (incl in adolescents), CVD and premature death
- **Encourage all *supportive* relationships in patients’ lives**
 - “Who do you talk to?”
 - We may be the only person some of our patients really talk to
- **Relationship-centered Care (beyond “patient-centered” care?)**
 - A provider’s individual nature and personal experiences are as important as and interact with the patient’s
 - Clinicians are encouraged to empathize rather than maintain professional detachment
 - Clinicians have a great opportunity to impact a patient’s health, but a patient can also influence the clinician’s well-being (“reciprocal influence”)
 - All relationships are important, incl pts, clinicians, family members, office staff

Journal of General Internal Medicine , Supplement, January 2006

Maybe not all Depression is all bad...

- Sometimes it might be a sign that something needs to change in someone's life
- Avoid the temptation to “fix” only the pain and not slow down enough for the patient to discern the causes
 - ask the patient with a neuropathic foot ulcer if not having pain is always a good thing
 - many mental health providers prefer that antidepressants not be started until they see them
 - pain is a good motivator for change
 - sometimes understanding the meaning (and acting on it as needed) is the best treatment of all
 - “spirit of sadness” (Duran et al, *J Counseling & Development* 2008;86:288-295)



So... what to do?

- **Screen all patients with diabetes for depression annually**
 - If screen is +, provider must assess whether cause of symptoms is depression and/or other
 - If depression, assess severity + whether/how quickly to refer
 - **Treatment plan**—meds, counseling and beyond!
- **Change our programs:**
 - **Case management** (as much as and whenever possible!)
 - Behavioral Health integration into primary care/diabetes clinic
 - Find ways to incorporate cultural values, strengthen relationships
- **Change ourselves...**

Importantly:

How do we see our patients?

- **Old Model**: Patients are a bit lazy and must be reminded, coaxed, educated and even guilted/threatened into following our good medical advice.
- **New Model**: Given the context of their past and current life circumstances, patients are doing the best they can—clinicians can be important educators, counselors, cheerleaders, and non-judgmental supports to patients on their life journeys.

“We cannot heal only the physical. We must remember our Spirit. If we focus only on food and exercising and forget our emotions, then we become out of balance. I tell myself to listen to my Spirit. But sometimes I become spiritually bankrupt. I feel alone and empty. When I don’t listen to my Spirit, I may feed my physical body with too much food. But it is not my physical body that needs nourishment. It is my Spirit that is hungry.

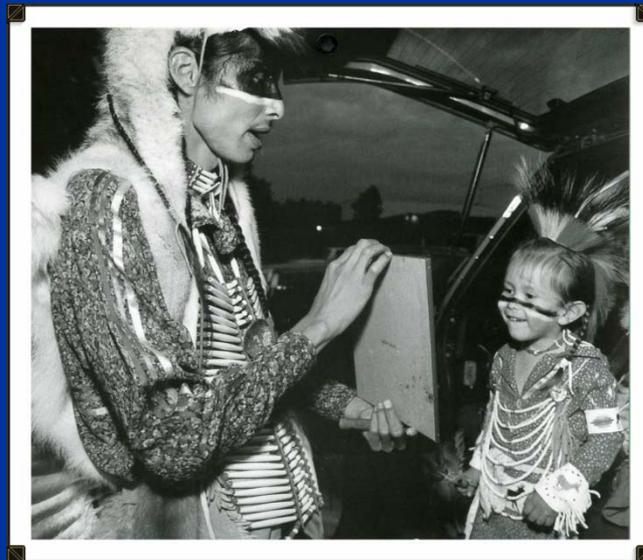
...The death of my mother was piled high on top of other losses—failed relationships, lost children and loved ones. Like many of our Native people, I carry the burden of the injustices of boarding schools and loss of land.

...I think I understand my people, and why we are sometimes called ‘noncompliant.’ When the Spirit is in pain, what does it matter if you take your medication or take a walk? Look within and see where you are with grief. Reach out to someone.

...Let the healing begin.”

Jacquie Arpan, Health for Native Life 2002(4) : 39-41

And when, by that mysterious alchemy of genes, environment and life experience, some of us absorb more of the pain of the journey, we can be there to help lighten the load, to remind them of the importance of their presence, and to mirror back to them their own beauty until they can remember.



“Dance with Desire to Make the World Well”