Helping with combination of depression & diabetes.

Jeff Matranga, Ph.D., ABPP

Psychologist,

Board Certified in Health Psychology

M.S. in Clinical Psychopharmacology

Health Psych Maine

www.hpmaine.com

jeff@hpmaine.com

Overview: Depression & Diabetes

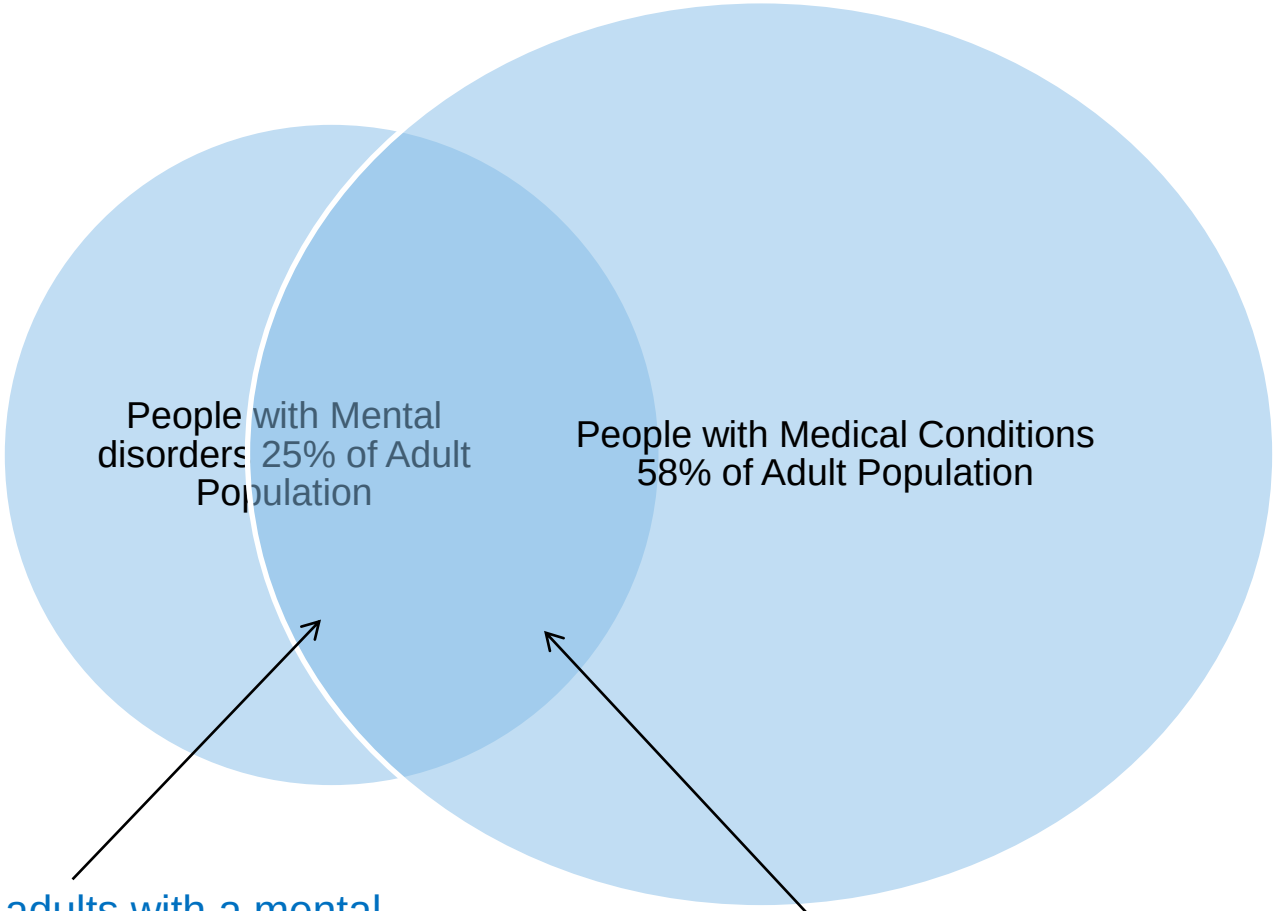
1) Depression – what is it?
2) Interaction of depression & diabetes.
3) Treatments for depression:
   a) Medications.
   b) Therapy: CBT, behavioral activation.
4) Supporting behavioral activation for depression *or* increasing wellness behaviors.
5) Behavior change tips for improving eating and exercise.
   a) Nuggets from Kelly McGonigal, Ph.D., *The Science of Willpower*.

Diabetes & Self-Management

- Diabetes affects **25.8 million** Americans, 8.3% of the population.
  - Diagnosed: 18.8 million.
  - Undiagnosed: 7.0 million.
- Direct & indirect costs in U.S.: $174 billion.
  - Direct costs: $116 billion
- Increasing emphasis on patient empowerment in diabetes care providers.
- Corresponding expectation for individuals with diabetes to increase their knowledge and self-care behaviors.

http://diabetes.niddk.nih.gov/dm/pubs/statistics/#Diagnosed20

Why Medical & Behavioral Integration?



68% of adults with a mental disorder have a medical condition

29% of individuals with a medical condition have a mental disorder

Anthem BlueCross BlueShield

Comorbidity : Diabetes & Depression

1) When Type 2 & depression occur together, depression:
   a) Usually unrecognized & untreated.
   b) Course is usually severe.
   c) Up to 80% have depressive relapse within 5 years.
   d) Less likely to adhere to self-care.
      a) → results in worse overall outcomes.
2) Risk of MDD (major depressive disorder):
   a) doubles for those with diabetes.
   b) goes from 2.8% for those without a medical condition to 4.0% if 1 or more medical condition present.
3) Conversely, depressed adults have 37% higher risk of developing type 2 diabetes.

Katon, W.J. (2008). The comorbidity of diabetes mellitus and depression. *Am. J. Med., 121(11 Suppl 2*), S8-15.

Comorbidity of Diabetes & Depression

4) When type 2 & depression occur together → higher healthcare costs for general medical care (as opposed to depression tx).
5) When the depression is treated:
   a) ↓ healthcare costs.
      a) Cost of treating the depression is offset by the savings in medical care.
   b) ↑ work productivity.

Treating the depression decreases economic burden and improves clinical outcomes.

Katon, W.J. (2008). The comorbidity of diabetes mellitus and depression. *Am. J. Med., 121(11 Suppl 2*), S8-15.

Interaction: Diabetes & Depression

- Stress of diabetes and managing it may cause depression.
- Hyperglycemia may cause mood disorder.
- Depression may reduce overall physical health.
- Depression may decrease motivation and complicate self-management.
- Some with depression eat more and gain weight.
- Those with both conditions have more severe diabetes symptoms.

Symptoms of Depression

5 or more of the following symptoms for at least 2 weeks, causing significant distress or interfering with functioning:

(A1) Depressed mood.

(A2) Loss of interest or pleasure in usual activities.

(A3) Significant change in weight or appetite when not dieting.

(A4) Insomnia or hypersomnia.

(A5) Psychomotor agitation or retardation.

(A6) Fatigue or loss of energy.

(A7) Feelings of worthlessness or excessive or inappropriate guilt.

(A8) Diminished ability to think or concentrate, or indecisiveness.

(A9) Recurrent thoughts of death (not just fear of dying), suicidal ideation, or a suicide attempt or a specific plan.

Treatments for Depression

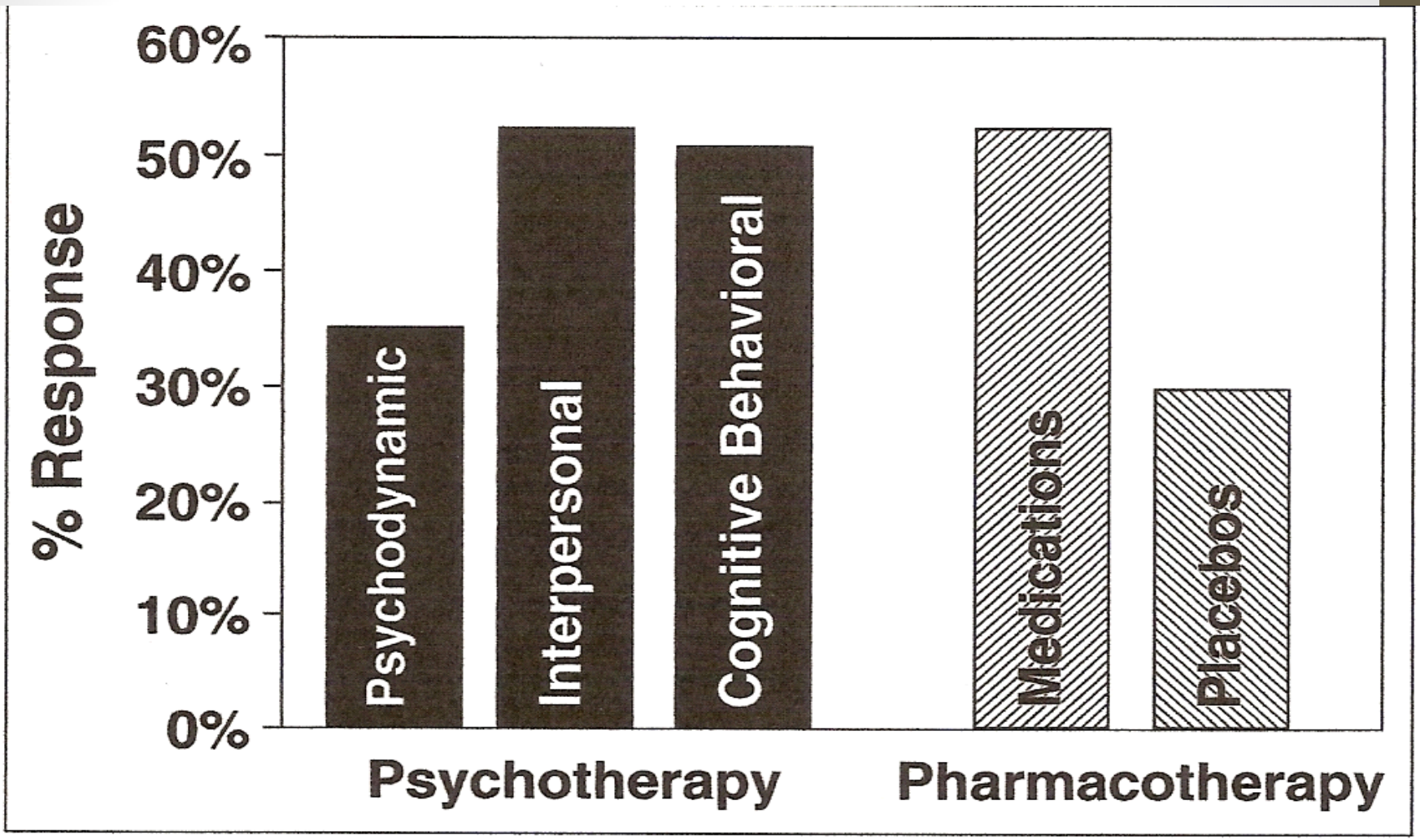


Fig. 3. Percentage of patients responding to psychotherapy versus medications and pill placebo. The estimates for the three kinds of psychotherapies are based on a meta-analysis conducted for the Agency for Health Care and Policy Research (Depression Guideline Panel, 1993); the estimates for medications and placebos are drawn from a subsequent update of that review (Mulrow et al., 1999). Adapted from Hollon (2002).

Response & Relapse Rates

	ADMs	CBT	Combo
Avg. Response Rate	50-55%	50-55%	~73%
Relapse Rate, 1 yr.	70%	30%	

Vittengl et al., 2007. CBT with continuation or booster sessions can do very well compared to meds.

Mindfulness & Depression Relapse

6 RCTs (n=593) of MBCT vs tx as usual (TAU) for recurrent major depression.

- 43% risk reduction for those with 3 or more episodes.
- No risk reduction for those with only 2 episodes.
- In 2 studies, MBCT = maintenance ADMs for relapse prevention.

Piet, J. & Hougaard, E. (2011). The effect of MBCT for prevention of relapse in recurrent major depressive disorder: A systematic review and meta-analysis. *Clinical Psychology Review, 31*, 1032-1040.

3 ½ min. video clip explaining this from Mark Williams, Ph.D., Oxford researcher:

http://www.youtube.com/watch?v=8GVwnxkWmSM

Antidepressant Meds ADMs & Diabetes

- Fluoxetine (Prozac) & bupropion (Wellbutrin) associated with decreases in fasting BG levels, better glycemic controls, and short-term weight loss (Katon, 2008).
- SSRIs and…
  - Insulin: some reports of increased insulin sensitivity.
  - Increased hypoglycemia reported with sulfonylurea agents such as glyburide/Micronase & tolbutamide.
  - Sertraline (Zoloft) + tolbutamide: increased plasma level of tolbutamide due to reduced clearance (up to 16%) with sertraline.

Drug Interactions continued

- None noted with:
  - NDRI – Wellbutrin/bupropion.
  - SNRIs: venlafaxine (Effexor); duloxetine (Cymbalta); desvenlafaxine (Pristiq).
- Trazodone & sulfonylurea (e.g., tolbutamide): increased hypoglycemia.

ADMs & Weight Gain

- SSRIs: more likely with **paroxetine** (**Paxil**) vs other SSRIs.
- NDRI: Wellbutrin/bupropion: not likely.
- Mirtazapine: **very likely**.
- Older antidepressants: very likely due to antihistaminic actions or H1 blockade.
- SNRIs: not likely.
- Atypical antipsychotics as augmenting agents: likely weight gain with most of them.

Behavioral Activation v Cog v Rx

- Prior dismantling studies suggested that behavioral components may account for efficacy of cognitive therapy.
- Tested behavioral activation (BA) vs. cognitive vs. Rx (paroxetine).
- For severely depressed:
  - BA = meds
  - Both BA and meds superior to cognitive.

Dimidjian et al. (2006). Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the acute TX of adults with major depression. *Journal of Consulting and Clinical Psychology (JCCP)*, 74, 658-670.

Supporting Behavioral Activation

1. Activity menu.
2. Activity log with 0-10 mood ratings.
3. Problem-solving skills.

The Common Ground

- Behavioral activation for depression.

- Helping to mobilize patient for increased self-management.

Skills for Managing Chronic Conditions/Diseases

1. Pain management.
2. Fatigue management.
3. Breathing techniques.
4. Relaxation and managing emotions.
5. Nutrition.
6. Exercise.
7. Medications.

Lorig et al. (2006). *Living a Healthy Life with Chronic Conditions*.

Self-managing Diabetes

1. Maintaining safe BG level.
2. Healthy eating.
3. Exercise.
4. Stress and emotions.
5. Medications:
   a. Insulin injections.
   b. Medications (pills).

Lorig et al. (2006). *Living a Healthy Life with Chronic Conditions*.

Enhancing Motivation for Behavior Change

Behavior Change Tips

1) What are the *individual's* goals?
2) Avoiding dead person's goals.
3) Effective goals are…
4) Why change? Why bother?
5) 1-to-6-hour rule.
6) Avoiding deprivation.
7) Preventive eating.
8) 45-minute delay. Use it.
9) Self-acceptance & self-compassion.
10) Batting average vs perfection or all-or-nothing.
11) Keep a log.
12) Dealing with compulsive urges, e.g., riding the wave.
13) Evaluating progress.
14) How friends and family can help.
15) Kelly McGonigal, Ph.D., The Science of Willpower.


Self-Compassion
A healthier way of relating to yourself.

Self-Compassion Context

- West to East.
- Self-Compassion
- Mindfulness
- Honor our wiring and work with and around it.

You suppose you are the trouble

But you are the cure

You suppose that you are the lock on the door

But you are the key that opens it

It's too bad that you want to be someone else

You don't see your own face, your own beauty

Yet, no face is more beautiful than yours.

Rumi

1. What are the *individual's* goals?

Not yours or society's goals.

What are *their* goals?

2. Avoid: Dead Person's Goals

- Avoid dead person's goals: goals that a person can reach by dying.
  - For example: lose weight, eat less, be less anxious, etc.
- We generally do better at *increasing* something. Try to invert or flip over the goal to *increase* something. For example: "My goal is to exercise 3 times per week this week" or "I want to see how many nights out of 7 I can eat only fresh fruit after dinner."

3. Effective goals are

1. specific;
2. attainable; and
3. forgiving (less than perfect).

- Good: "Work up to walking 30 minutes, 3 days per week."
  - Specific, attainable, and forgiving.
  - Frame or tone: “Let’s see how many days I can walk this week.”
- Not so good: “I will walk an hour every day.” Set-up for discouragement and failure. Might be appropriate later.

4. Why Change? Why bother?

- Write out list of pros and cons for changing – 4-cell approach.
- Include short-term and long-term pros and cons.
  - We are more motivated by short-term.
- Be clear on the payoffs for current behaviors. Your current behavior pattern is reinforcing on some level. If you are clear on the short-term payoffs of your current behavior patterns, you have a better chance of changing those patterns.
- Review pros and cons regularly.

4. WHY CHANGE? WHY BOTHER?
4-cell Pros & Cons sheet

Cultivate Change	**Staying the Same**
Advantages:	**Advantages:**
Disadvantages:	**Disadvantages:**

5. The 1-to-6 Hour Rule

You are never more than

1 to 6 hours away from feeling good about yourself.

1-TO-6-HOUR RULE

You are almost always within 1 to 6 hours of feeling good about yourself.

Our wiring sometimes leads us to choose what feels good in the next 10 seconds to 10 minutes. Avoidance wiring: don't get eaten by a predator.

Try to choose what will feel good in the next 1-6 hours.

6. Avoid triggering deprivation.

Avoid deprivation.

Deprivation backfires – triggers a backlash.

7. Preventive Eating

- Preventively plan for vulnerable situation by eating a healthy food ~45 minutes before exposure to a dense food.
- For example, eat decent-sized apple or 10-20 almonds 45 minutes before getting home after long day or before going to cafeteria.
- Drink glass of water before exposure to dense foods.

8. 45-minute Delay

- Use the delay while avoiding deprivation.
  1. You are thinking about a second portion.
  2. *Don't* tell yourself you cannot have it.
  3. *Do* tell yourself: I am going to experiment with having 1 moderate portion. Then, I will wait 45 minutes. If I still want it, it's mine.
- Combine with preventive eating, e.g., eat apple 45 minutes before high-risk time.
- Playful tone for goal: "How many times this week might I leave food on plate?" or "How many times might I eat half a sandwich and wait?"

9. Self-Acceptance, Self-Compassion

- Work at it. Cultivate it.
- At your core, you are already fine.
- Accept yourself and grow from there out of love.
- Fear and self-loathing are lousy motivators – at most, only short-term pay-off and then they backfire.
- Exposure-based exercise. If dislike seeing self, pick one image or mirror shot and just stay there until distress drops from peak back down to ~3/10.

10. Batting Average vs Perfection

After making a specific plan and setting reasonable goals:

- Batting average versus…
- cycle of perfection → ultimately slip → disengagement.
- "Let's see how many times this week I can complete my log?"
  - Week 1: 2 times
  - Week 2: 4 times
  - Week 3: 5 times…. Etc.

11. Keep a Food Log

- People who keep a log are much more likely to succeed and much more likely to maintain the changes long term.
- Keeping a log cultivates mindful eating versus mindless eating.
- Track progress daily.
- Plan what you will eat *before* you eat.
- Paper in pocket for counting calories.

11. Keep a Food Log - continued

- The day you go off track is the day you will want to skip the log.
  - THAT is the day to complete the log – sort of like confession – will feel better when you look at it soberly. "Yep – I did eat that much."
- "Now, how can I do better tomorrow… let's get the oatmeal set up tonight…"
- See how many days per week you can complete the log. Gradually increase.

12. Dealing with compulsive urges, e.g., Riding the Wave or Surfing the Urge.

- Sometimes, a compulsive relationship with certain foods.
- Dopamine + stress response tell you: "FINISH THE JOB!!! EAT IT!!! The may be a famine around the bend."
- But if you wait, the distress/urge level comes back down.
- Chocolate (example):
  - Obtain tiny amount.
  - Place sliver on tongue or smell it mindfully.
  - Set aside but observe the remaining chocolate and inner desire/urge to eat more chocolate. Just observe chocolate and inner urge.
  - Rate intensity of desire 0-10.
  - Within 10 minutes, usually, desire will fade to 3/10 or lower.

12a. The trap of trying to Avoid Discomfort

A trap in 2 ways:

1) Not possible, ultimately.
2) Avoidance can work temporarily, but then creates increased sensitivity to pain/discomfort. Vicious cycle.

- Avoidance creates its own pain.
- …okay…so…what's a person to do?
- Acknowledge the discomfort and slowly move towards what you value.

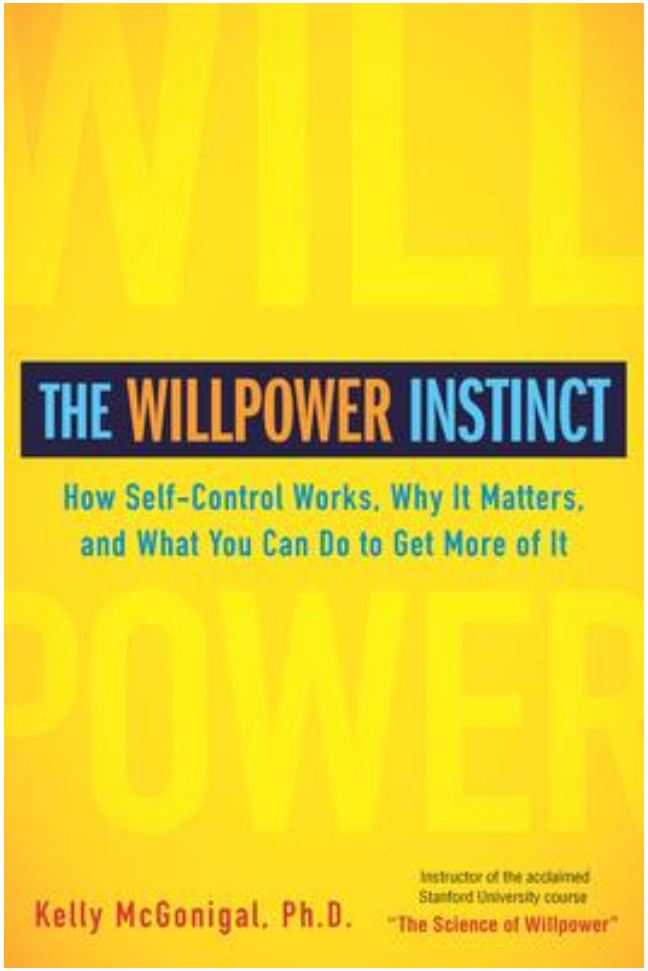
13. Evaluating Progress

- Sum up and evaluate progress weekly.
- Adjust plans for the following week.
- Praise and reward. No guilt or shame.
- Slips don't have to be relapses.
  - View slip as a learning experience. Successful behavior changers usually report a few failed attempts that they learned lessons from that eventually led to success.
  - Tone of problem-solving. No guilt or shame. "Okay, what happened? What can I do differently next time?"

14. How Family & Friends Can help

- Give me tons of praise.
- Support me logistically. e.g., offer to cover kids for exercise. Cook and shop differently.
- Don’t nag or get over-invested in how or what I am doing. Let me own it.

15. Kelly McGonigal, Ph.D. The Science of Willpower



5 Willpower Rules
Kelly McGonigal, Ph.D. :

1) Train your willpower physiology. Research support:
   a) meditating,
   b) sleeping enough,
   c) exercising, and
   d) eating a low-glycemic (*ideally plant-based*) diet.
2) Forgive yourself.
3) Make friends with your future self.
4) Predict for and plan around failure.
5) Surf the urge.

Surfing the Urge

1. Notice the thought, craving, or feeling. Allow yourself to feel what you're feeling.
2. Accept and attend to the inner experience.
3. Breathe and give your brain and body a chance to pause and plan.
4. Broaden your attention and look for the action that will help you achieve your goal. Look for the first opportunity to re-connect to your goal.

Kelly McGonigal, Ph.D.

Motivational Interviewing (MI) & Diabetes

3 broad self-mgt tasks:

- Managing the disease:
  - Taking medications.
  - Following a diet.
  - Engaging in physical activity.
  - Self-monitoring.
- Maintaining one's daily life while living with chronic illness.
- Dealing with emotional aspects of the disease such as depression, frustration, anger, and fear.

Key preconditions for Diabetes Self-Mgt.

- sufficient knowledge of the condition and its treatment;
- skills to manage the condition and to maintain functioning (ability to identify problems, barriers, and supports and to generate solutions);
- internal, or autonomous, motivation (belief in treatment effectiveness and its relevance to one's goals, values, and priorities);

Key preconditions for Diabetes Self-Mgt. cont'd

4) confidence in one's ability to successfully execute specific tasks (self-efficacy);
5) adequate environmental support to initiate and sustain behavioral changes (assistance to overcome obstacles, reminders, encouragement, and support from valued people at appropriate times and places); and
6) Effective affect management – coping with depression or other emotional responses.

MI

Knowledge and information are necessary but insufficient to help motivate patient to sustain behavior changes.

MI: Your Potential role in with Diabetes Patient

- help patients examine and explore
  - ambivalence
  - pros and cons of change and to identify and mobilize their own intrinsic values and goals to stimulate behavior change—NOT to ensure change.
- **Develop discrepancy**: how does current behavior conflict with core values?
- Minimize unsolicited advice.
- Avoid argumentation and direct persuasion.
- Roll with resistance:
  - Patients overcome their own obstacles
  - It's a dance, not a wrestling match

MI: Encourage "change talk"

- Recognition of an issue
- Exploration of patients' personal reasons for making a change
- Discussion of potential consequences of current behaviors
- Expression of hope or confidence about making a change

MI CONTINUED

- Elicit and encourage patients' beliefs in their ability to carry out and succeed in achieving a specific action step.
- Help patients identify a specific step that is important to them and that they are confident they can carry out.
- Help patients identify and articulate possible barriers to achieving the specific step they have chosen and possible ways to overcome those barriers.
- Provide support and arrange follow-up.

MI: Communication Skills

- Expressing empathy.
- Using open-ended questions.
- Appropriate non-verbal communication techniques.
- Reflective Listening. Builds rapport.
  - Content reflections.
  - Emotion reflections.
  - Can reinforce patient's self-motivational statements, e.g., "I hear you saying you would like to better manage your diabetes." "So, you feel better when you make even a little headway with logging your food."

MI: Agenda Setting & Asking Permission

- Advice and information generally not given without asking permission first.
  - When they *are* given, it is within framework of supporting autonomy.
- ***Engage*** patients in deciding:
  - What behaviors to address.
  - How much change they are willing to attempt.
- If patient becomes defensive or starts focusing on why they cannot change**, roll with the resistance**, listening nonjudgmentally. It is a dance, not a wrestling match.

MI: Elicit-Provide-Elicit (E-P-E)

Format for giving information or advice: Elicit-Provide-Elicit (E-P-E):

- **Elicit**: find out what they already know and what they would like to know.
- **Provide**: new information or advice, giving choice about how much.
- **Elicit**: encourage them to interpret and react to the information or advice and tailor responses accordingly.

MI Comm. Skills Summary

- **Eliciting change talk**. Key strategy.
  - Assess for **importance** and **confidence** for change.
  - Explore **discrepancies** between current behavior and their values and goals.
- **Action planning**.
  - Once patient identifies an area they are willing to work, break down longer-term goals into **short-term steps** – something they can do over a time span of hours and days. What, where, how, and when.
  - **Explore possible barriers** and ways the patient can overcome them.