

DM in Adolescence

- Juvenile onset IDDM (insulin dependent diabetes mellitus) is an uncommon pediatric illness in young children.
- 1 in 500 school-age children and adolescents.
- The physical, emotional, and social demands of intensive diabetes self-management are challenging for adolescents given developmental changes and stresses.
- During adolescence, it is common for teenagers to have difficulty adhering to the relatively strict dietary protocols and restriction in their activities
- Adolescents with diabetes are at risk for poor disease control leading to hospitalizations and long-term complications, such as eye, kidney, and nerve damage.
- Coping means to understand the individual's independency; and if coping does not go well, especially in adolescence, depression might occur.
- Age does not necessarily mean that the patient will cope easily, it depends on her/his personality.

Poor diabetic control was correlated with:

The presence of psychiatric disorders

Difficulties in reading

Adverse psychosocial risk factors

Effects of low glycemic control:

- ❖ Nephropathy
 - ❖ Retinopathy
- Most common effects
in adolescents
- ❖ neuropathy
 - ❖ Diabetic foot (A diabetic foot is a foot that exhibits any pathology that results directly from diabetes mellitus or any chronic complication of diabetes mellitus.)
 - ❖ Disability
 - ❖ Strokes
 - ❖ Mortality
 - ❖ Cardiac/vascular
 - ❖ Oxygen and glucose are especially needed for learning (i.e., mental functioning) so; diabetic (adolescence) patients are prone to face issues related to learning.



Stages of Coping: (important)

Shock and denial: No treatment & diet control
(could take up to 6 months. more than that is abnormal)

Anger

Searching for a cause & Negotiation

Depression

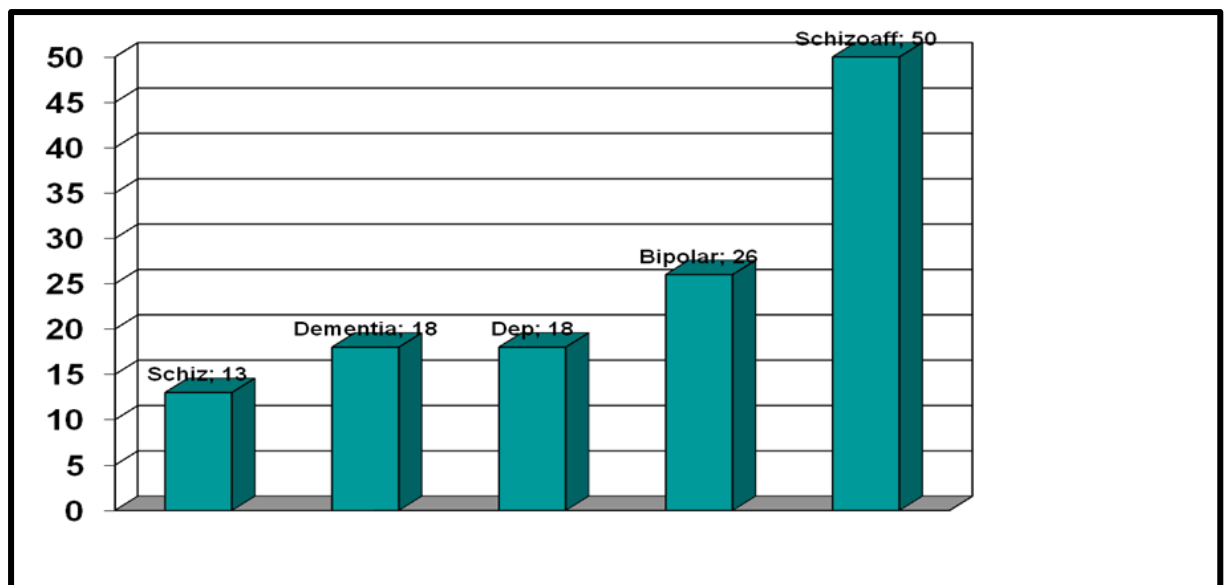
Acceptance

Some patients might skip stages or have one before the other.

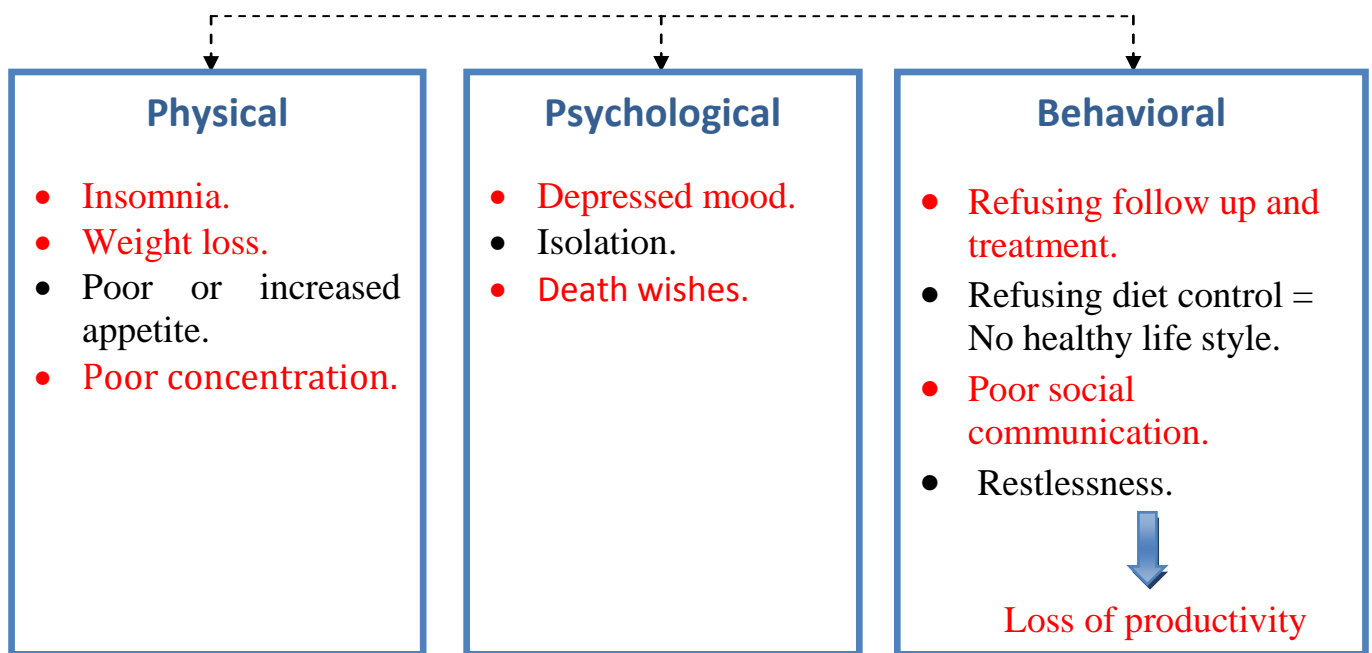
The goal is to help the patient reach this stage and allow him/her the time they need in each stage.

Not in Females' slides.

Prevalence of Diabetes among patients with major psychiatric disorders:



Signs of Depression:



What are the benefits of treating a depressed diabetic patient?

- Better compliance and acceptance.
- Better life quality.
- Better relationships with others.
- Deleting Negative thoughts.
- Preventing future complication of DM.
- Better productivity.

Management:

1. Teenagers must begin to:

- a. Assume greater responsibilities for the treatment of the illness.
- b. Appreciate that there is a direct relationship between careful compliance and disease sequel.

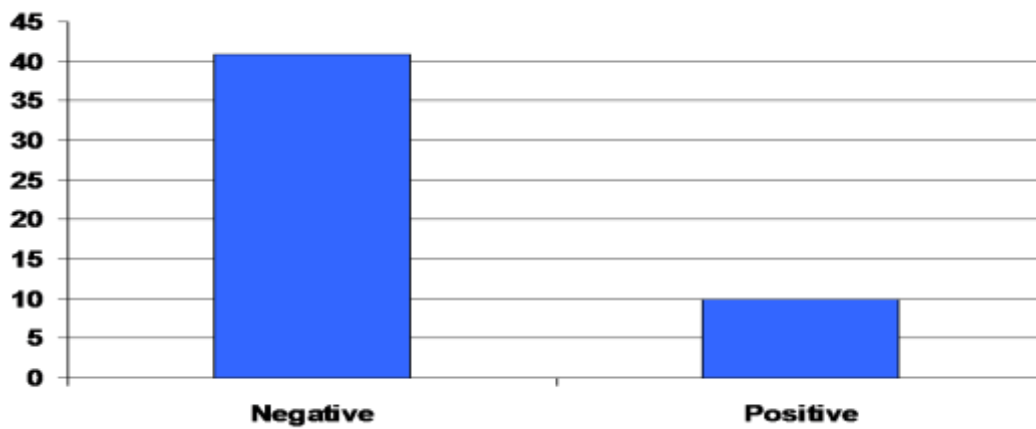
2. Assess the patient's physical and psychological status.

3. Start the treatment.

- a. Biological treatment: e.g. Antidepressants.
- b. Psychological Treatment: CBT*
- c. Family (**Social**) Therapy: *Creating a supportive environment for the patient by talking to the family and friends.*

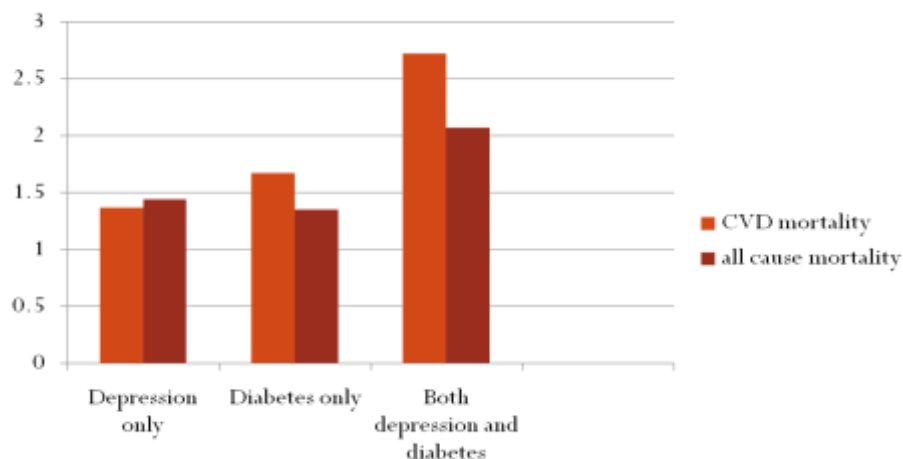
***CBT:** Cognitive behavioral therapy is a common type of mental health counseling (psychotherapy). With cognitive behavioral therapy, the patient works with a mental health counselor (psychotherapist or therapist) in a structured way, attending a limited number of sessions. Cognitive behavioral therapy helps the patient to become aware of inaccurate or negative thinking, so he/she can view challenging situations more clearly and respond to them in a more effective way

Impact of family problems on the prevalence of depression among adolescents with type I DM

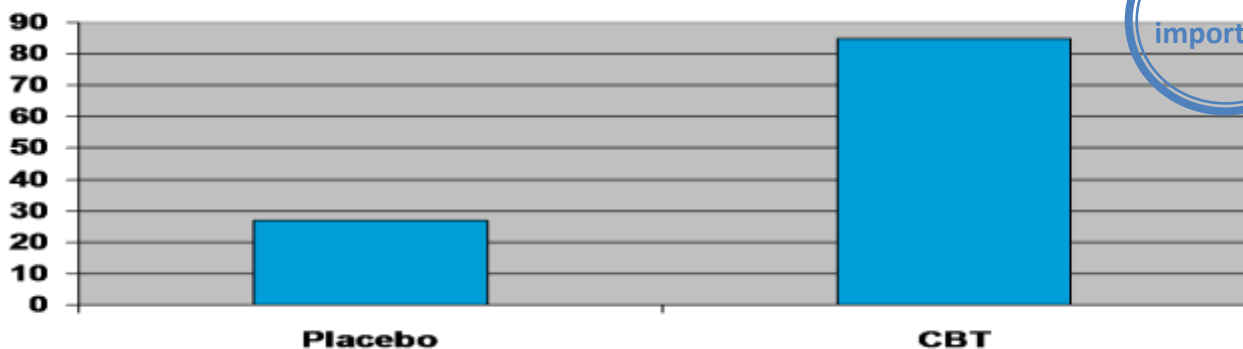


Not in Females' slides.

Deadly combination: Depression, diabetes doubles mortality risk



Response to psychotherapy



Not important.

Placebo: is a simulated treatment for a disease intended to deceive the recipient.

*The males' doctor mentioned a real-life case touching on the importance of this subject:
A 15-year old female was admitted to the Pediatrics Clinic after having been admitted 22 times to the emergency due to episodes of life-threatening ketoacidosis because she refused to take medication.*

She was not depressed that much, yet she was not happy about being a diabetic. She was finally admitted to the Psychiatry wards and following investigations, the psychiatrist found out that she was embarrassed by having to take a bag full of medications while the other girls are having normal, "girly" ones.

Sadly, she died as a result of an episode one day.

Summary:

- Diabetes type (I) is **uncommon** in children.
- **Adolescents** go through developmental changes (hormonal changes) and stresses such as: social pressure. They also struggle to adhere to dietary protocols and to restrict their activities.
- For this reason, **they're considered at high risk of poor control of their disease** which might lead them to get hospitalized or to develop **complications** such as: nephropathies, retinopathies.
- Diabetes also affects their mental functioning and as a result, their learning skills will be affected too.
- Poor disease control is correlated with presence of psychiatric disorders (**especially depression**) and problems with emotions and behavior.
- Diabetic teenagers must try to cope with the disease to have a better quality of life and prevent the complications mentioned before. In the process of coping, they will go through different **stages**:
 - Shock & denial , Anger, Negotiation & searching causes, Depression, and finally Acceptance.
- Depression has **signs** which are:
 - Physical, Psychological, and Behavioral.
- The management of depressed diabetic adolescents has 3 components:
 - Biological (physical): Antidepressants (SSRIs mostly)
 - Psychological: **CBT** (cognitive and behavioral therapy)
 - Social: Family therapy
- Due to the patient's suicidal thoughts, **SSRIs** are preferred over TCAs because an overdose of a SSRI is curable while an overdose of a TCA is deadly.

Questions:

1- What might especially occur when coping with DM does not go well?

- A. Schizophrenia
- B. Bipolar Disorder
- C. Depression
- D. Dementia

2- What is the most common effect of poor glycemic control?

- A. Neuropathy
- B. Retinopathy
- C. Diabetic foot
- D. Strokes

3- What is the best choice of drugs for DM depressed patient?

- A. SSRIs (selective serotonin reuptake inhibitors)
- B. TCAs (Tricyclic antidepressants)
- C. Both A & B
- D. None of the above

Answers:

1- C , 2- B , 3- A

Best of Luck