

# **Psychotropic Medication Adherence in Children and Adolescents**

**NASTARAN HABIBI**

**CHILD AND ADOLESCENT PSYCHIATRIST**

**USWR**

- ▶ Around 20% of the world's children and adolescents have a mental health condition
- ▶ Inadequately treated mental illnesses can adversely affect the growing brain profoundly

- ▶ Longer duration of illness
- ▶ Reduced likelihood of remission
- ▶ Poorer functional outcomes
- ▶ Greater relapse rates
- ▶ Deterioration in school performance
- ▶ Dropping out of school
- ▶ Constant distress leading to self-harm
- ▶ Suicide attempts or death by suicide

- ▶ Aggression and irritability
- ▶ poor relationship with family or friends
- ▶ Inability to maintain employment
- ▶ Cognitive decline
- ▶ Substance use disorders
- ▶ The frequent need for a higher level of care such as inpatient hospitalizations for acute stabilization
- ▶ Healthcare costs

- ▶ Many of these disorders require medications as a treatment of choice
- ▶ However, if patients are unable or unwilling to follow treatment recommendations , pharmaceutical treatment approaches remain ineffective.

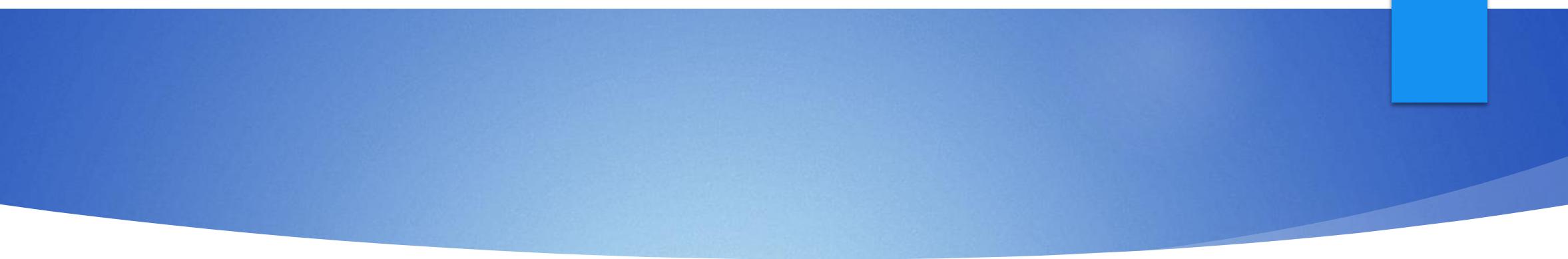


**As adolescents typically have poorer insight into their own functioning, frequently struggle with detachment from parental supervision and individualization, and show more problems with decision-making, they are believed to be more vulnerable in terms of non adherence compared to children and adults.**

- ▶ ***Factors that are predicted to contribute to non adherence***
- ▶ ***Clinical strategies to resolve the identified barriers for improving medication adherence***

# Adherence

**The extent to which a person's behavior — taking medication, following a diet, and/or executing lifestyle changes — corresponds with the agreed recommendations from a healthcare provider**



► **Direct and Indirect Methods to Measure Medication adherence**

- ▶ **Drug Attitude Inventory (DAI)**
- ▶ **Decision Self-Efficacy Scale**
- ▶ **The Treatment Acceptability Questionnaire**

- ▶ **The Medication Adherence Report Scale**
- ▶ **The Compliance with Treatment Opinion and Attitudes Scale**
- ▶ **ADHD Knowledge and Opinion Scale-Revised**

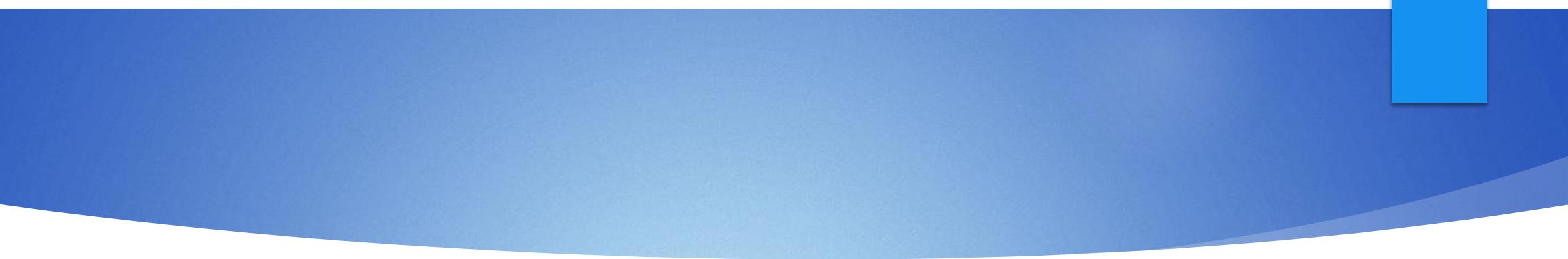
- ▶ **Brief Medication Questionnaire**
- ▶ **Medication Adherence Questionnaire**
- ▶ **Hill-Bone Compliance Scale,**
- ▶ **Eight-Item Morisky Medication Adherence Scale**
- ▶ **Self-Efficacy for Appropriate Medication Use Scale**

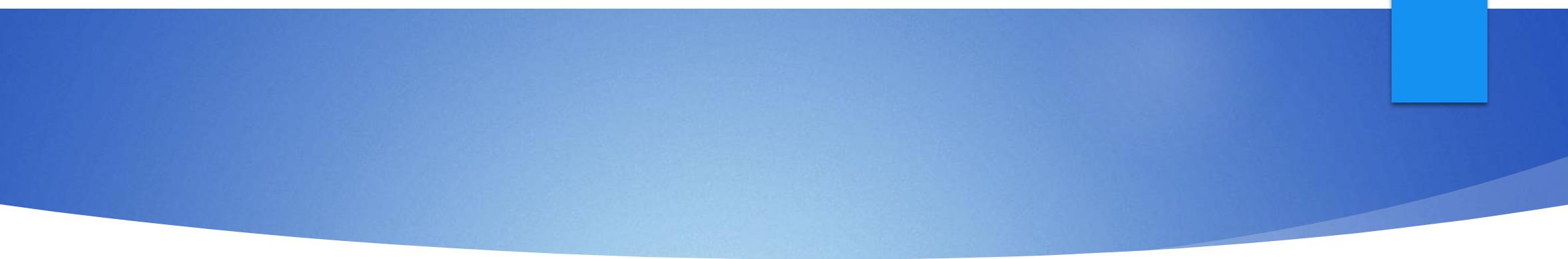
## Non adherence

- ▶ **6 % and 62 % (median 33 %)**



- ▶ Adherence is a complex multifactorial issue, involves several aspects of an individual, and many of these aspects are beyond their control.
- ▶ Family involvement
- ▶ The involvement of the treatment team

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- ▶ Earlier research considered treatment response and safety/tolerability of a medication to be particularly relevant for a patient's medication adherence



► More recent findings, by contrast, revealed that subjective factors such as patient's beliefs about their medication and previous experiences play a more important role than objective benefits and risks of the medication.

# Assessing Barriers in Medication Adherence

## *Cultural Factors*

► The stigma regarding mental illness is worldwide, and most cultures have certain beliefs and values.

# *Role of Families*

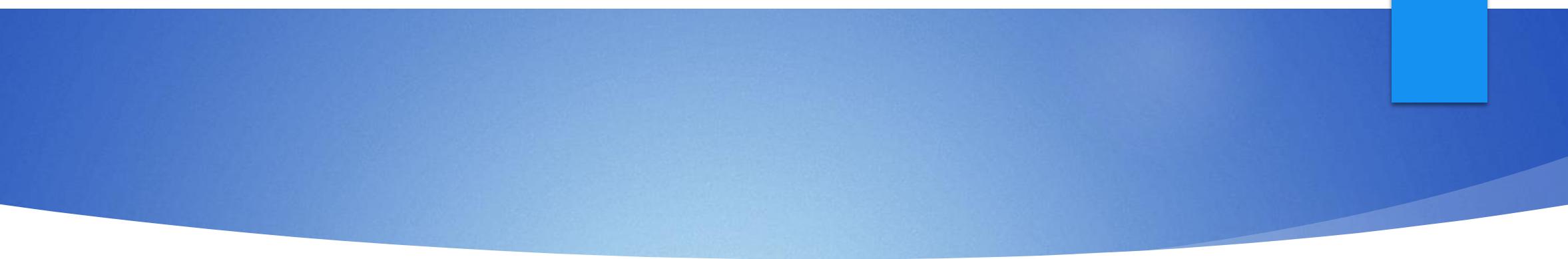
- ▶ Family perceives a child's behaviors as not problematic
- ▶ Lack of awareness and acceptance of mental health issues

- ▶ **Financial difficulties**
- ▶ **Other medical needs**
- ▶ **Parents have their own untreated mental health issues**

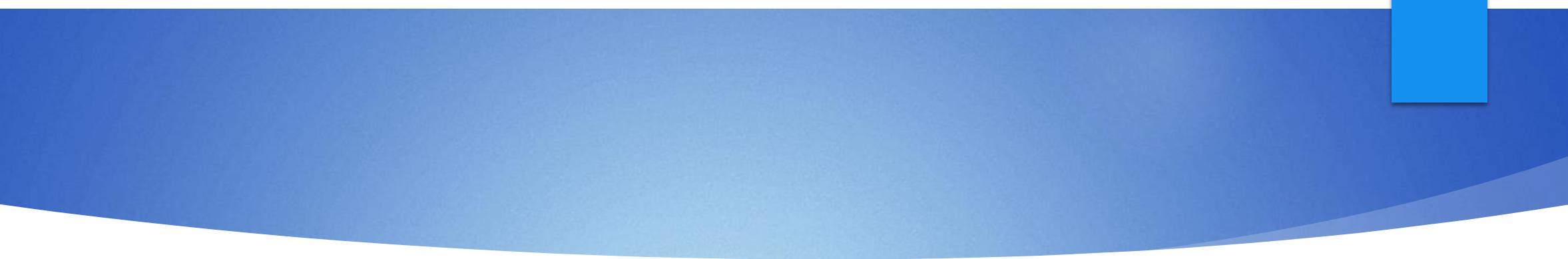
- ▶ **The negative interaction of parents with providers**
- ▶ **Disagreement in diagnosis**
- ▶ **Trust issues with the provider**
- ▶ **Adequate information about treatment**

## *Role of Children and Adolescents*

- ▶ **Some patients underestimate the need for medications**



► Children can still resist taking medications if they  
*do not like the taste or effects of medications or*  
*cannot swallow pills or capsule formulations of*  
**prescribed medications**



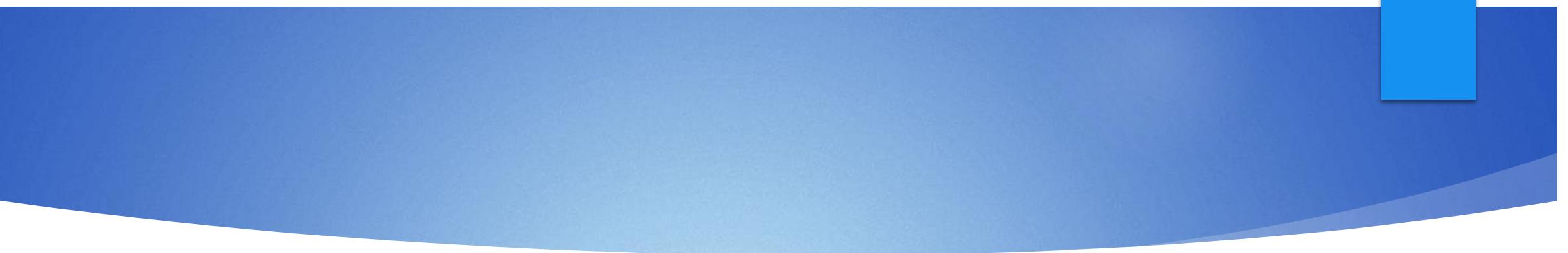
► Adolescence is an age of transition in which both parents and youth are equally involved in treatment decision

- ▶ Adolescents desire to be in control of their own lives or they wish to identify with other peers and do not want to be considered different

- ▶ Strained relationship with their parents
- ▶ conflict between parents
- ▶ Adolescents can perceive seeking treatment as a burden if there are existing family financial difficulties

- ▶ **Experiencing adverse effects**
- ▶ **Coexisting substance use/abuse and other medical ailments.**

- ▶ Staying away overnight from home
- ▶ Forgetting
- ▶ The regimen is too complicated
- ▶ Wanting to “fix” problems without the use of medication
- ▶ Medication ineffectiveness
- ▶ Fear of dependency
- ▶ Improvement in reported symptoms



► **Multiple diagnoses with complicated medication regimens can lead to poor adherence**

# ADHD

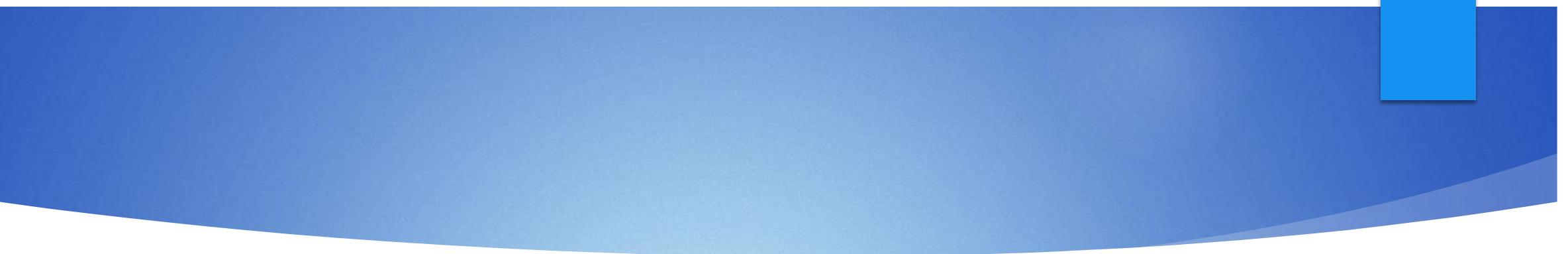
- ▶ **High response rate**
- ▶ **Adherence is approximately 60% across a 5-year span.**

## Severe mental illness

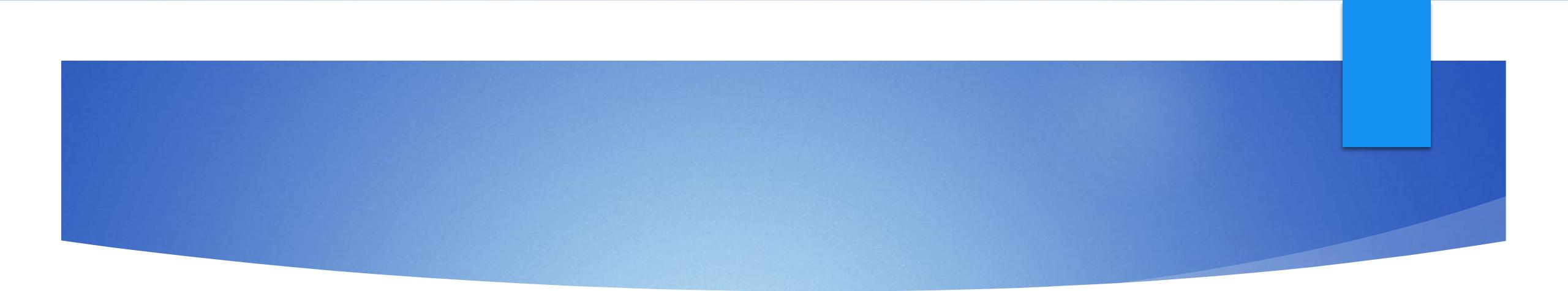
- ▶ Adherence: 65.9%
- ▶ Adherence was associated with patient and family attitudes toward care, adherence to psychotherapy, and insight.



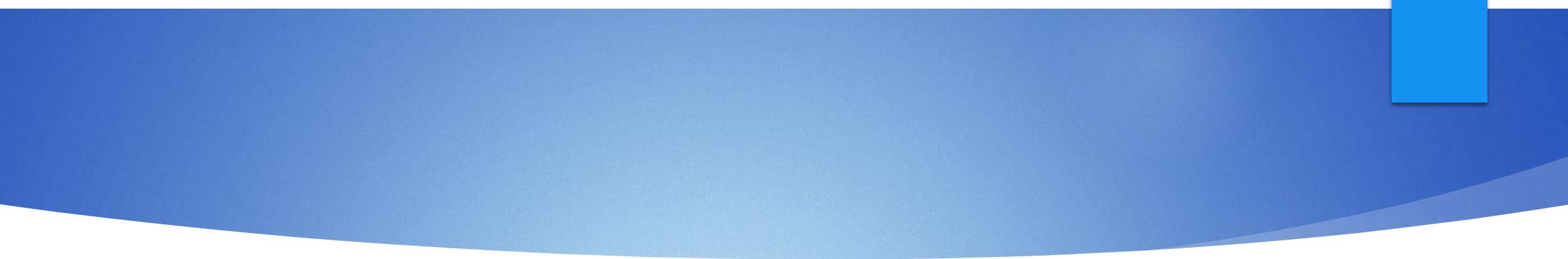
► **Nonadherence was associated with illness severity, substance use, and attention-deficit/hyperactivity disorder**



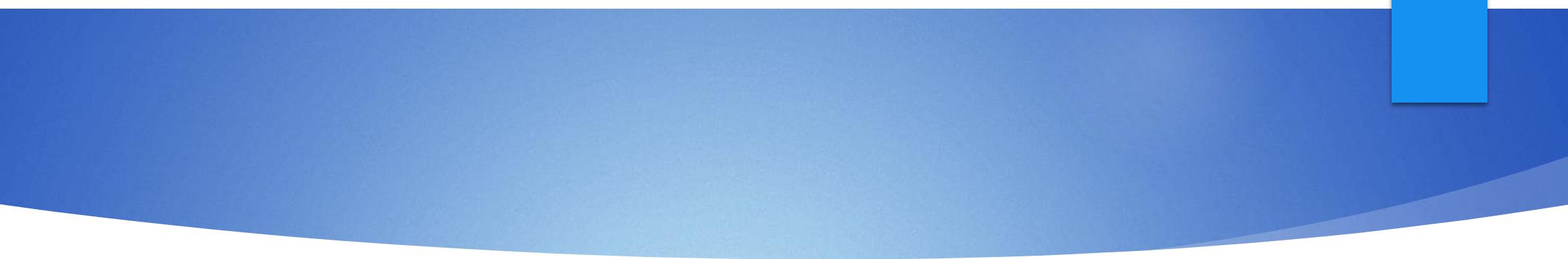
- ▶ Inconsistent medication intake not only causes deterioration of symptoms but also can lead to continued adverse effects, which should resolve otherwise when someone is compliant.
- ▶ These ongoing adverse effects of intermittent medication use also can substantially affect youths' disinterest in pursuing medications.



► Erratic adherence may cause the patient to undergo Withdrawal syndromes, that may sometimes be confused with adverse effects or worsening of the clinical condition.



► In addition, when medication is stopped, it may sometimes require a higher dose of medication to regain the same degree of symptom control



**Poor adherence**



**Incomplete symptom resolution**



**Unnecessary medications are added**

## Treatment team

- ▶ **Deficits in Collaboration among Treatment Team Members**

# Improving Adherence

# *Patients*

- ▶ Including them in the decision-making process and explaining the risks of non adherence
- ▶ Discussing about medication

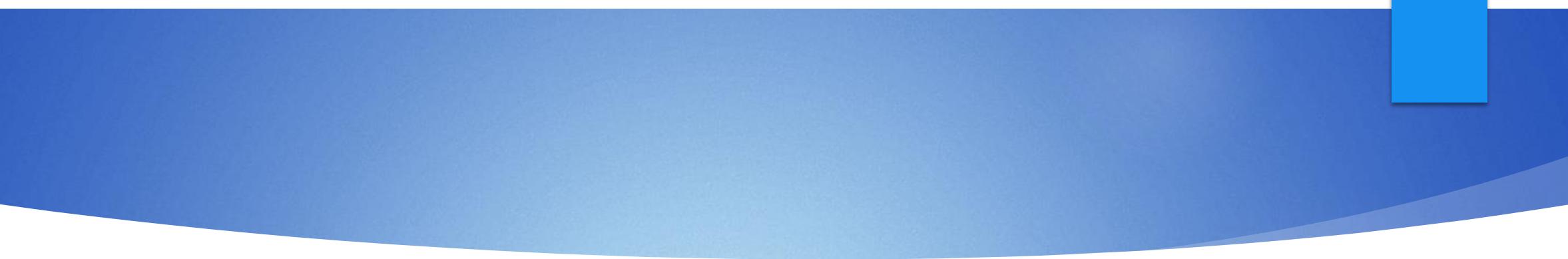
- ▶ The patient can also be informed that although medication may provide some relief or help, it cannot do everything, and he or she must still contribute effort toward reaching the treatment goals. This can be particularly important during adolescence, when issues of autonomy and control over one's own body are normal developmental concerns

- ▶ Slowly titration
- ▶ Adverse effects should be explained
- ▶ some children and adolescents, both outpatients and inpatients, actively try to avoid ingesting medication.

# Forgetfulness

- ▶ External reminders
- ▶ Simplifying the medication regimen
- ▶ Considering long-acting formulations of medications
- ▶ Reducing the number of doses
- ▶ Using pill containers to keep track of medications

- ▶ Co-occurring substance use and how it can affect their mental health
- ▶ Adolescents' perspectives toward medications

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- ▶ Predicting and addressing factors that can affect adherence in the future

# *Parents or Caregivers*

- ▶ **Empathetic listening**
- ▶ **simple language**
- ▶ **Sharing diagnosis and prognosis of treatment**

# Physicians

- ▶ Establishing rapport with patients and families
- ▶ Explain to patients and families the diagnosis and its prognosis

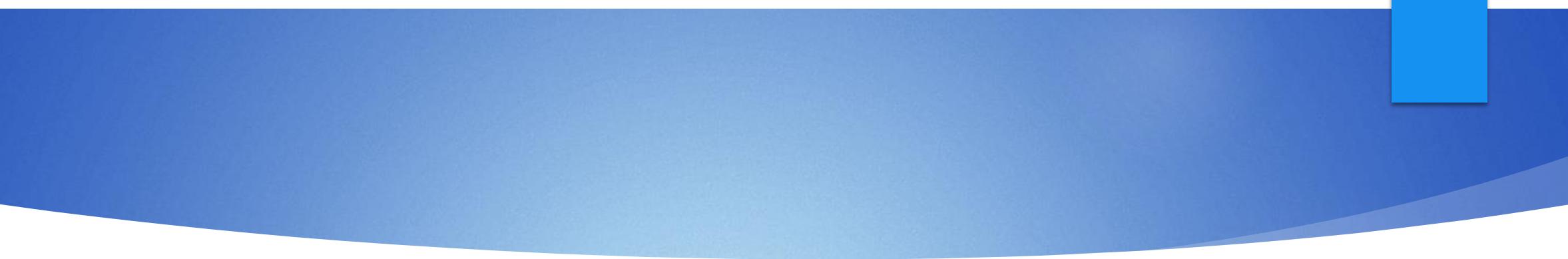
- ▶ **Discussions about treatment options**
- ▶ **Frequent follow-ups**
- ▶ **Identifying, developing, and modifying goals for treatment**

Therapist/ other providers

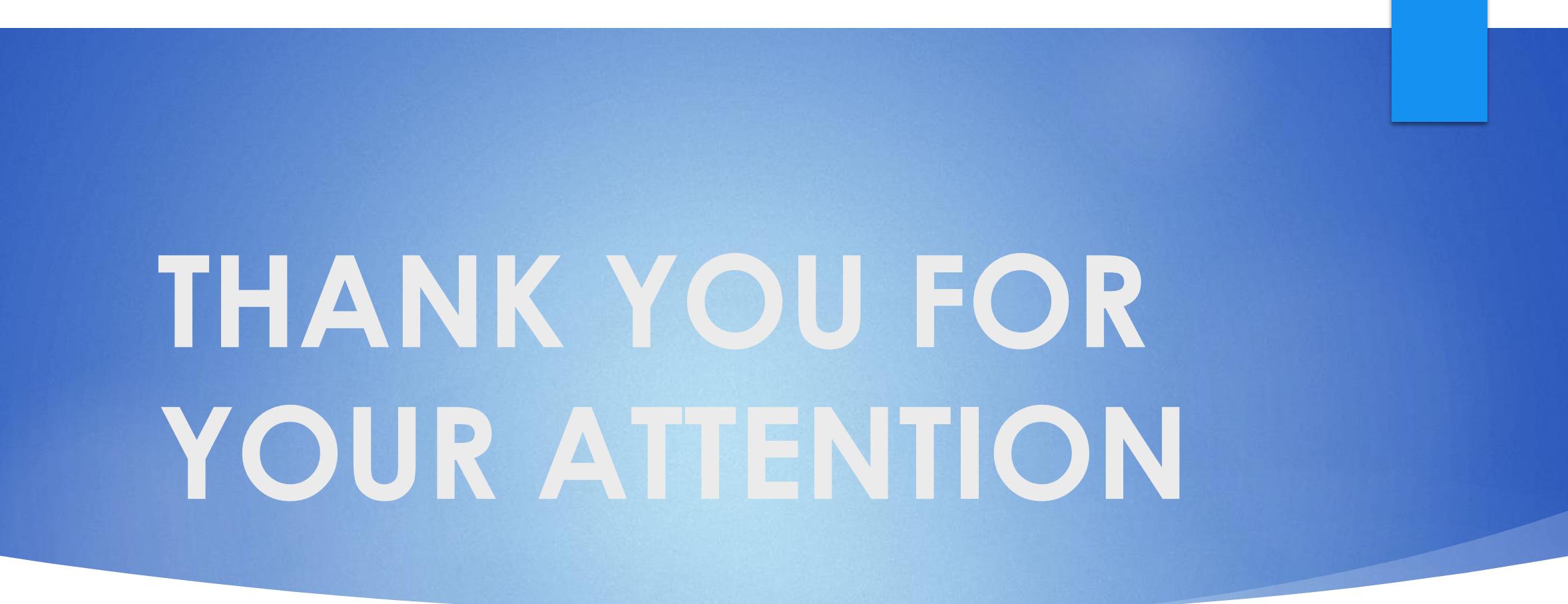
► **Therapists and Other Providers**

# Psychotherapeutic Interventions

- ▶ **Brief intervention**
- ▶ **MI**
- ▶ **CBT**



**Preventive efforts are prognosticated to be more effective in adherence, as compared with waiting until nonadherence begins.**



THANK YOU FOR  
YOUR ATTENTION