



# **Introduction to ADHD**

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**Consultant pediatrics neurologist  
HMC**

# Qatar ADHD support Group

## Physicians

- Pediatrics.
- Pediatrics neurology.
- Psychiatry
- Shafalh Center

## Psychologists

- HMC
- Family consulting center
- Qatar university
- Shafalh Center
- Schools

## Social Workers

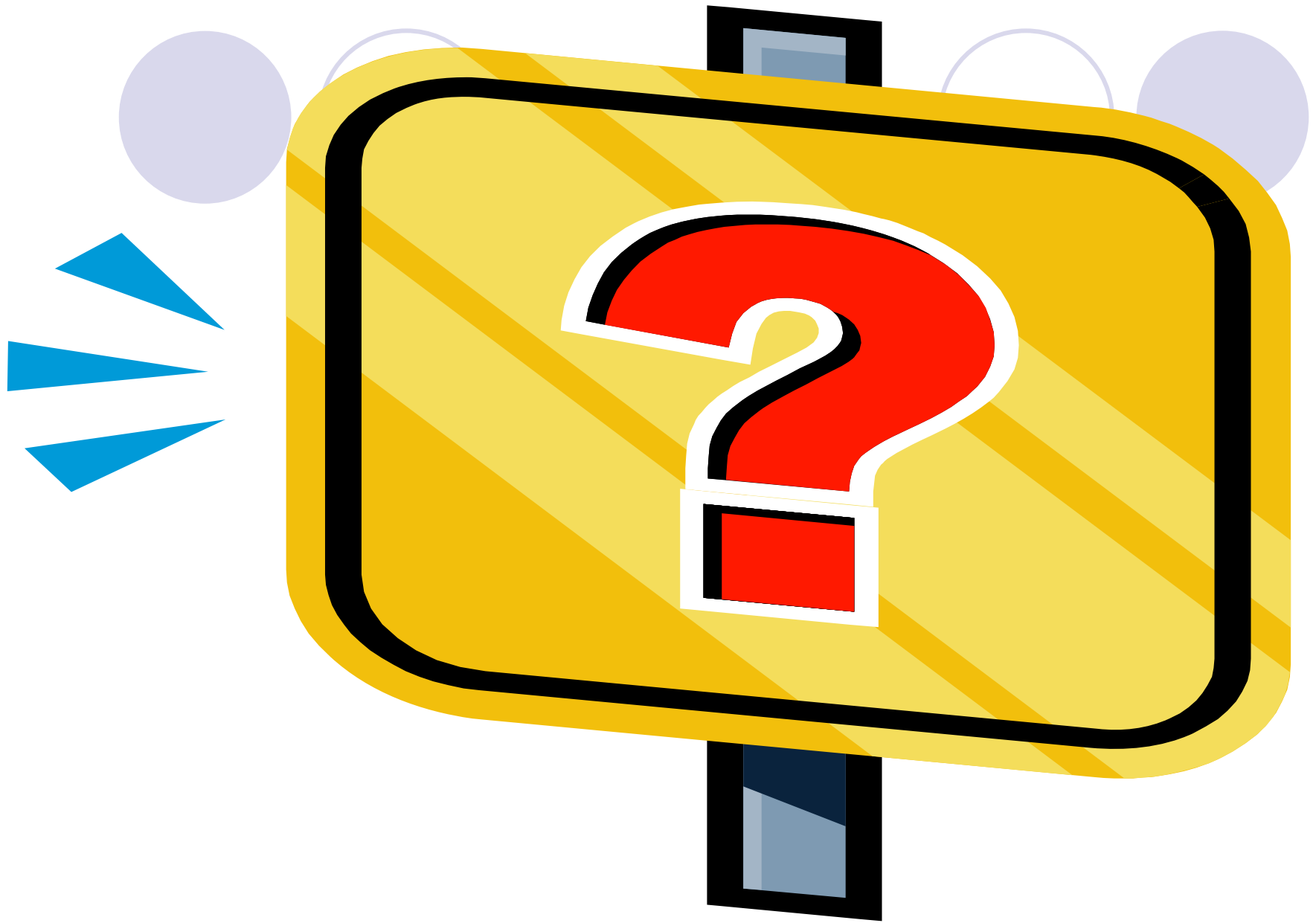
- HMC
- Family Consulting Center
- Schools





## Targets of the meeting


**Increase our  
knowledge  
about ADHD.  
know our local  
prevalence and  
management.**





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- A true story about Qatari boy:
  - An 8 year old child very hyperactive never calm, does not stay in his place neither in class nor at home, even in picnics and shopping.
  - Very embarrassing to his parents.  
Irritating to his teachers and colleagues.
  - Never concentrates or finishes any task even when his teachers remind him several times.
  - Leaves his seat anytime without permission.
  - Very rapid answers, usually wrong.

- 
- Rapidly moving from one activity to another without finishing any of them.
  - Usually punished **at home and school** due to his unorganized and careless behavior.
  - Due to all the previously mentioned over-activity of that kid, he jumped out of the window and broke **his cervical spine**.
  - Admitted with **quadriplegia and intubated** in intensive care; however he was lucky that he could walk again after surgical management.
  - Otherwise; he could stay rest of his life on a wheelchair.

- 
- During a visit to outpatient clinic; His mother noticed another kid who behaves in the same way as her kid.
  - The second mother told her that I came here to treat my child from his **ADHD**
  - She asked herself " why I should suffer all this without anybody told me before about **ADHD ???** "



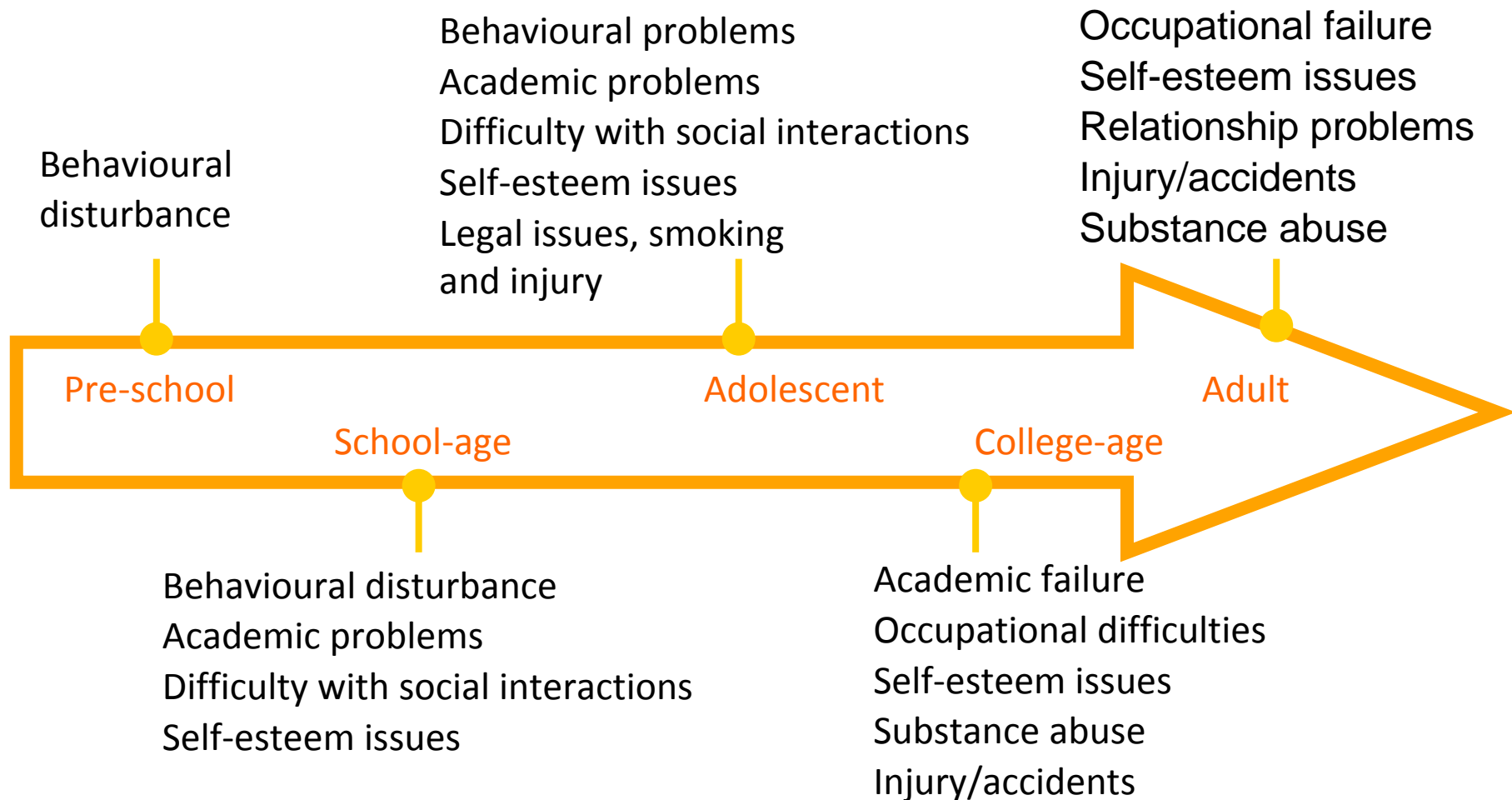




?????!!!

- ADHD is identifiable via behavioral, not physical characteristics, making it more likely to be misunderstood.
- **Misperceptions:**
  - Behaviors that directly result from ADHD are not primarily attributable to poor parenting, lack of discipline, low motivation, or intentional “trouble making.”
  - Not everything that fidgets and/or behaves defiantly is ADHD.

# Developmental Impact of ADHD





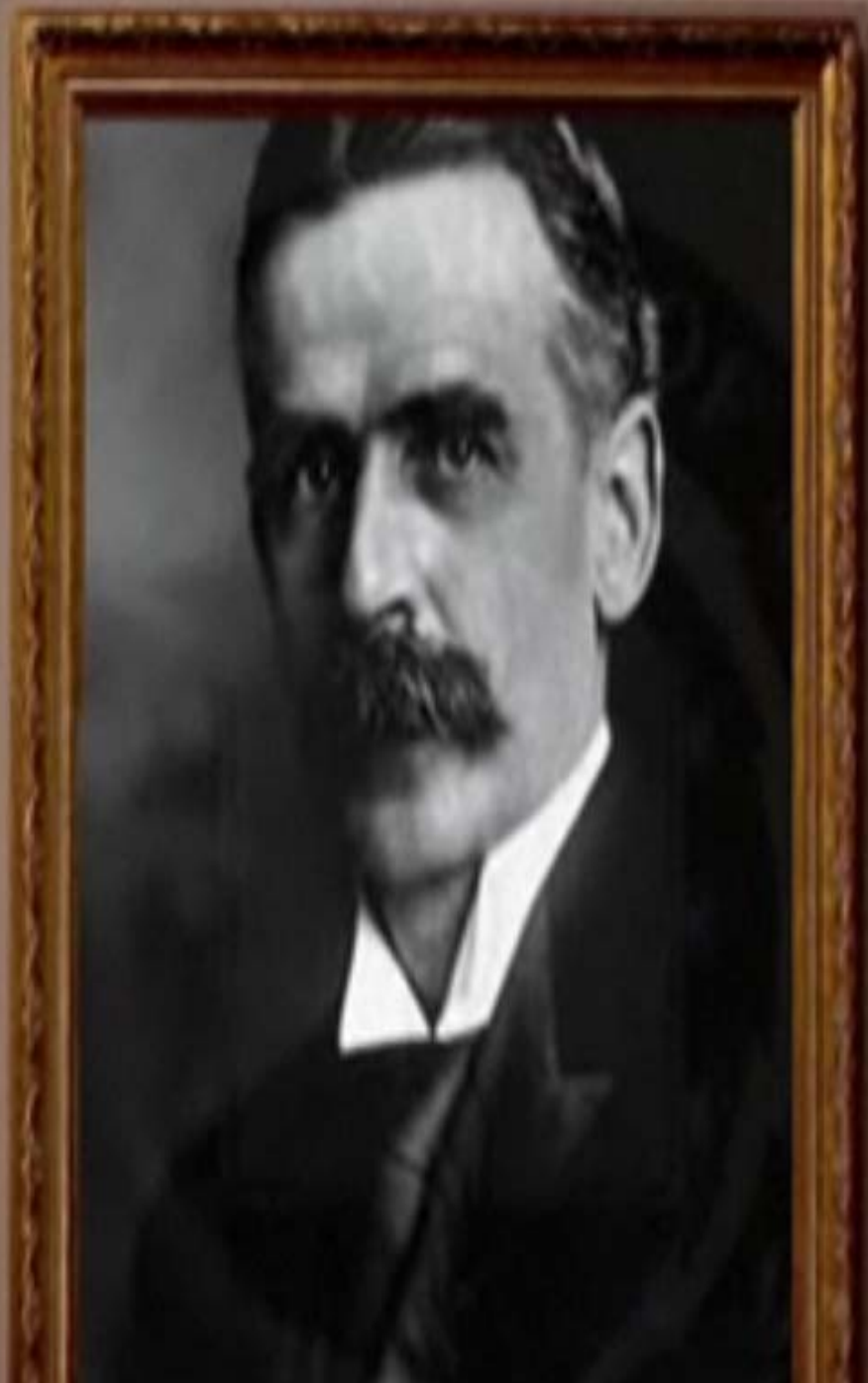
**Fidgety Phillip**

# History



- In 1845: Dr. Heinrich Hoffman. "The Story of Fidgety Philip"
- **Alexander Crichton (1763-1856):** An inquiry into the nature and origin of mental derangement

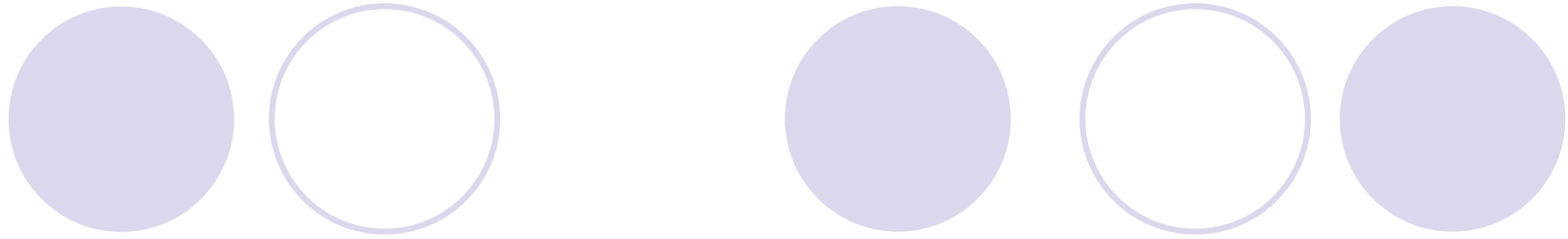
Sir George  
Frederic Still



# 20th Century 1902

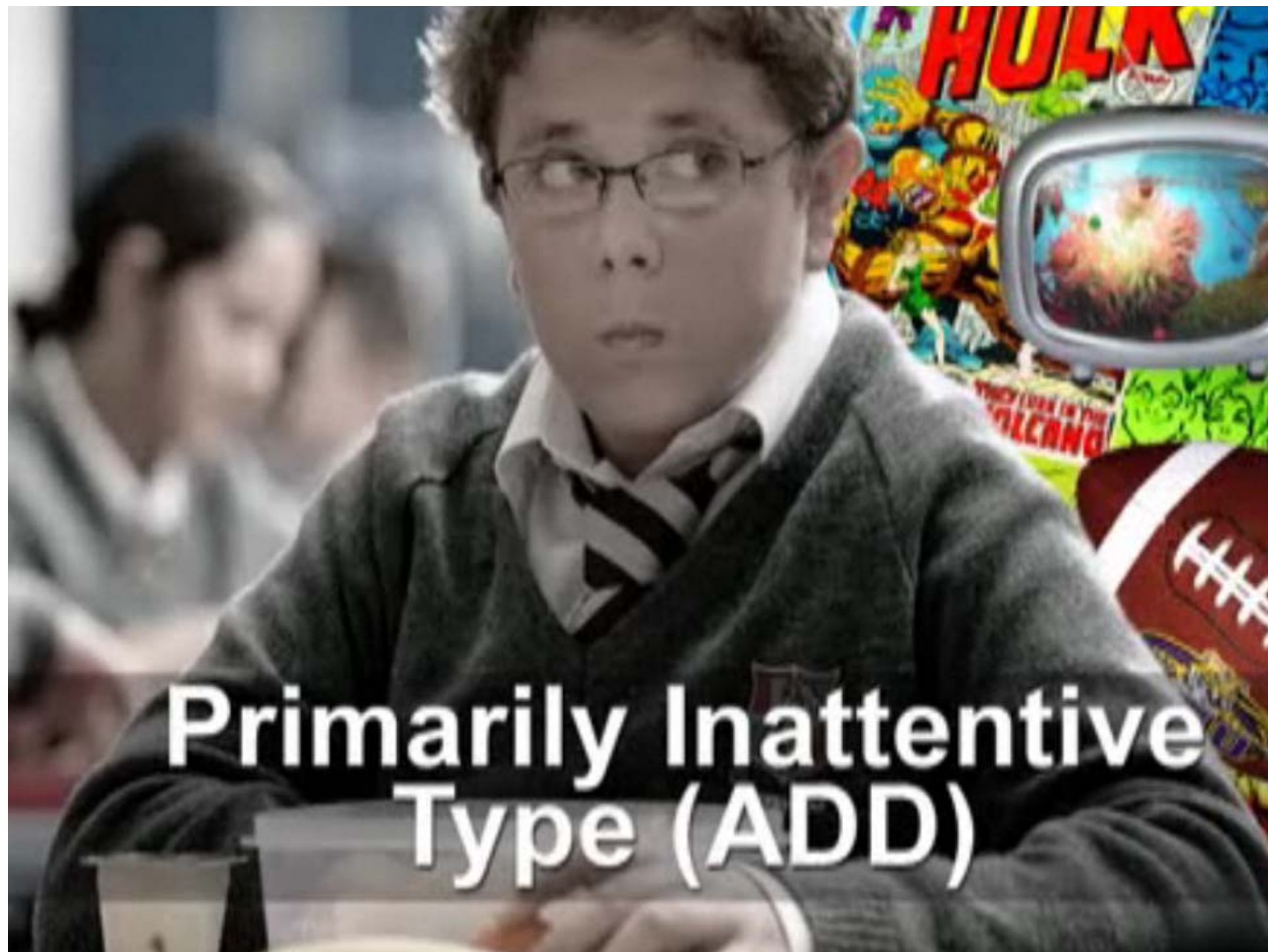
Sir George Frederick

- **43 children who had serious problems with sustained attention and self regulation, who were often aggressive, defiant, resistant to discipline excessively, emotional or passionate, which showed little inhibitory volitions. Had serious problems with sustained attention and could not learn from the consequences of their action, though their intellect was normal.**



- **In 1922: "Post-Encephalitic Behavior Disorders"**
- **1960: "Minimal Brain Dysfunction" .**
- **1968: "Hyperkinetic Reaction"**
- **1980: The DSM-II introduced ADD with or without hyperactivity**
- **DSM-IV (1987): ADHD**





**Primarily Inattentive  
Type (ADD)**



**Primarily Hyperactive-**

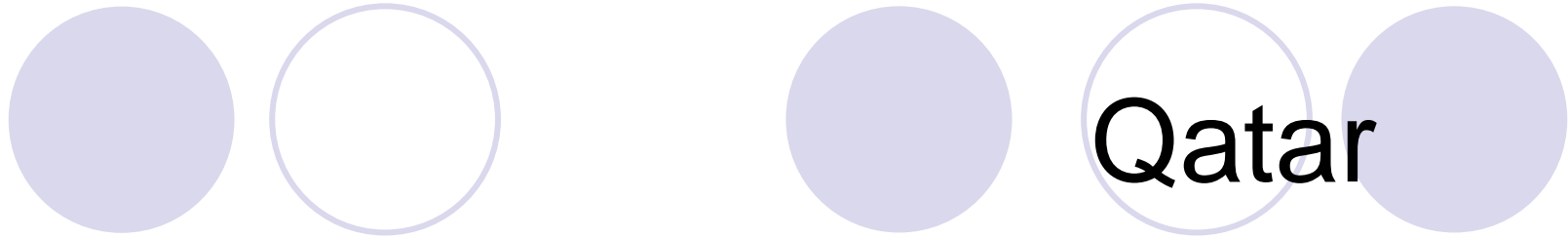




A person wearing an orange t-shirt and a grey cap is seen from behind, pointing their right arm towards a world map. The map is white and set against a bright blue sky with light clouds. The text 'ADHD in Qatar' is written in bold red letters across the upper part of the map.

## **ADHD in Qatar**

**How is our beliefs, Knowledge  
and attitude ??**



Ritalin : 1994

First book:2006

First research: 2006

First support group: 2008

First Symposium: 2009

Hyper kids



# Prevalence



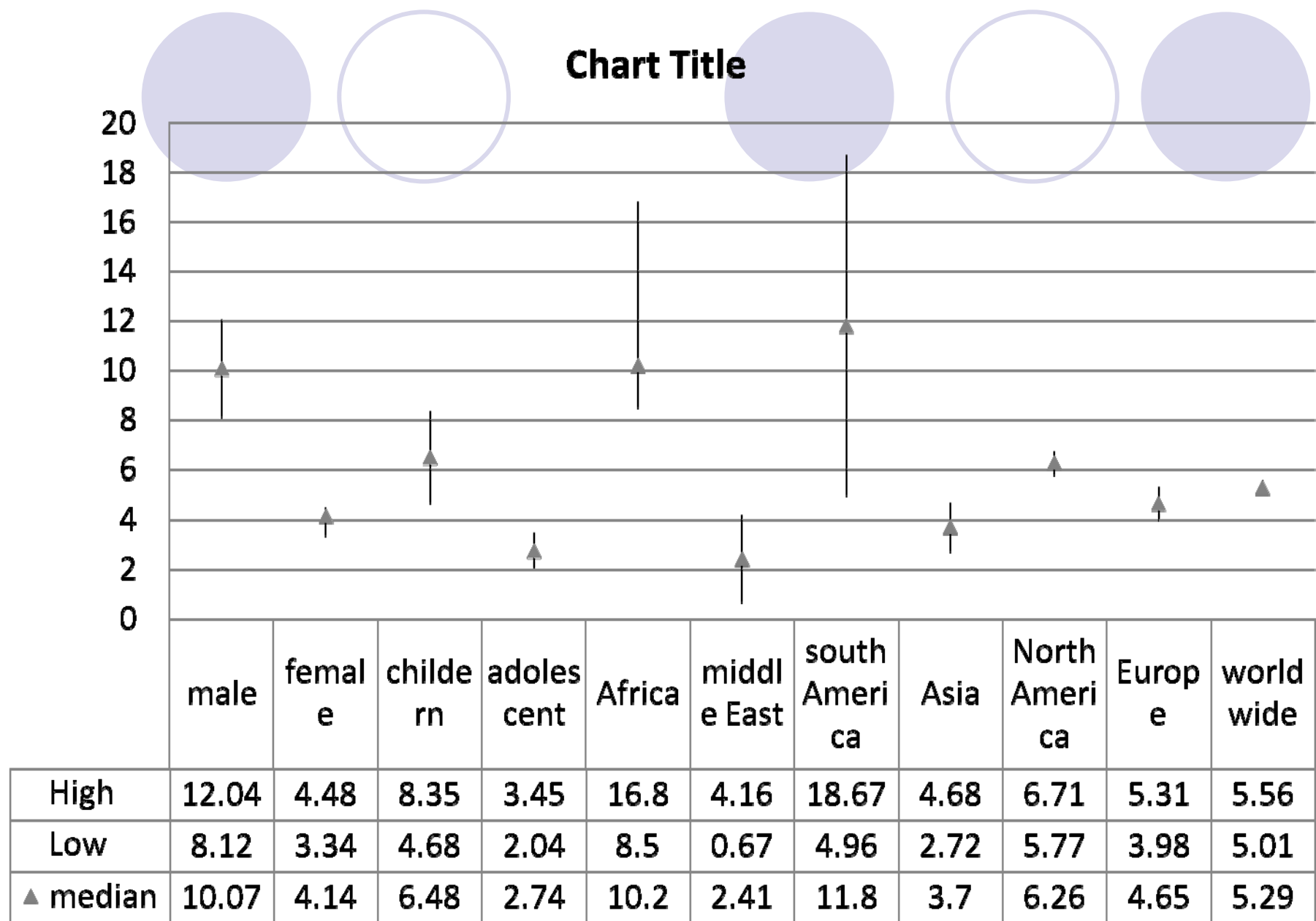
- One of the most widely diagnosed psychiatric disorders in children and adolescents, and impacts **3-5%** of individuals between the ages of 6 and 12 years.
- There has been **increasing recognition** over the past decade that AD/HD is also **persistent and affects approximately 50% of adults** who were diagnosed as children or adolescents.

***C Keith Conners***



## Continued ...3

- 2% to 6% of the school age population which translates to 1 or 2 children per classroom of 30 students.
- 3:1 to 9:1 male to female ratio



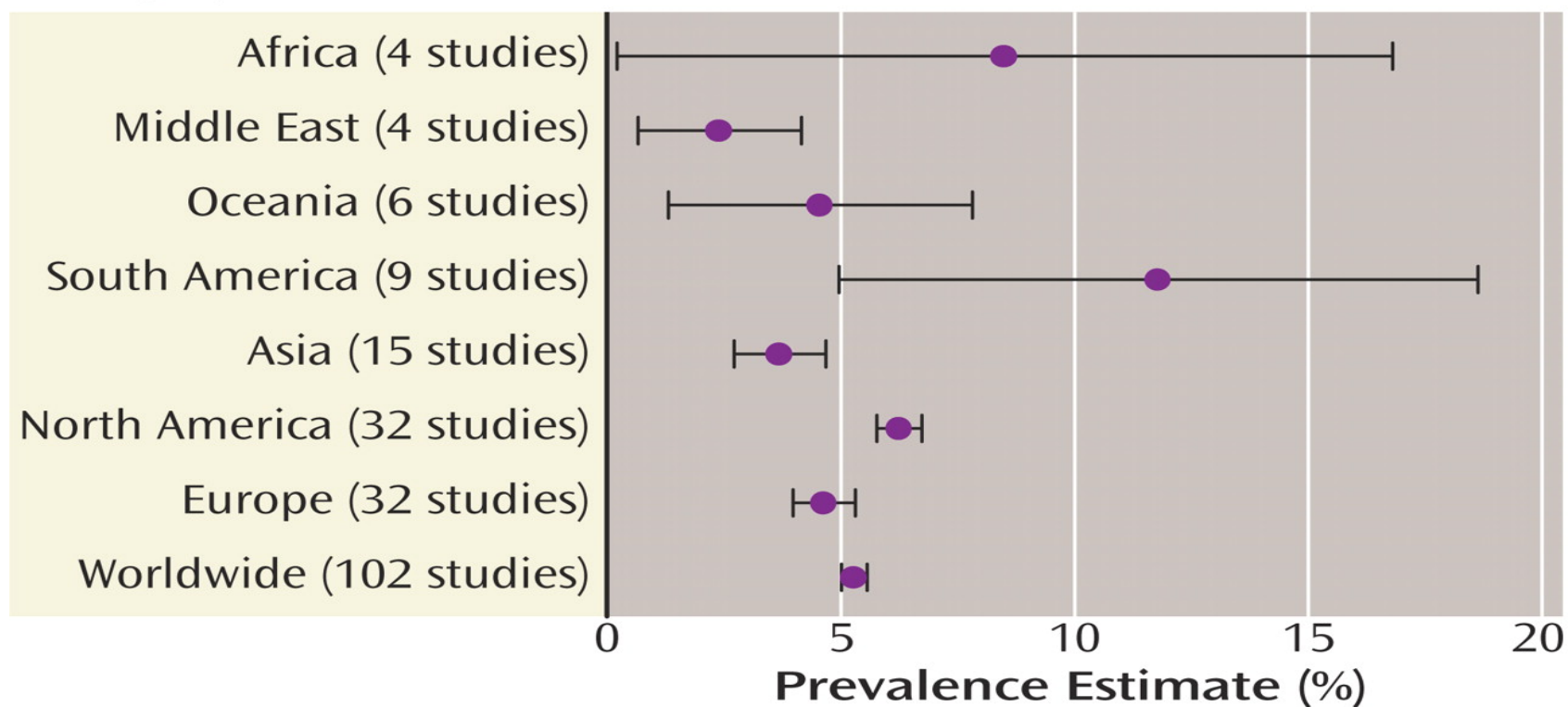
## Gender

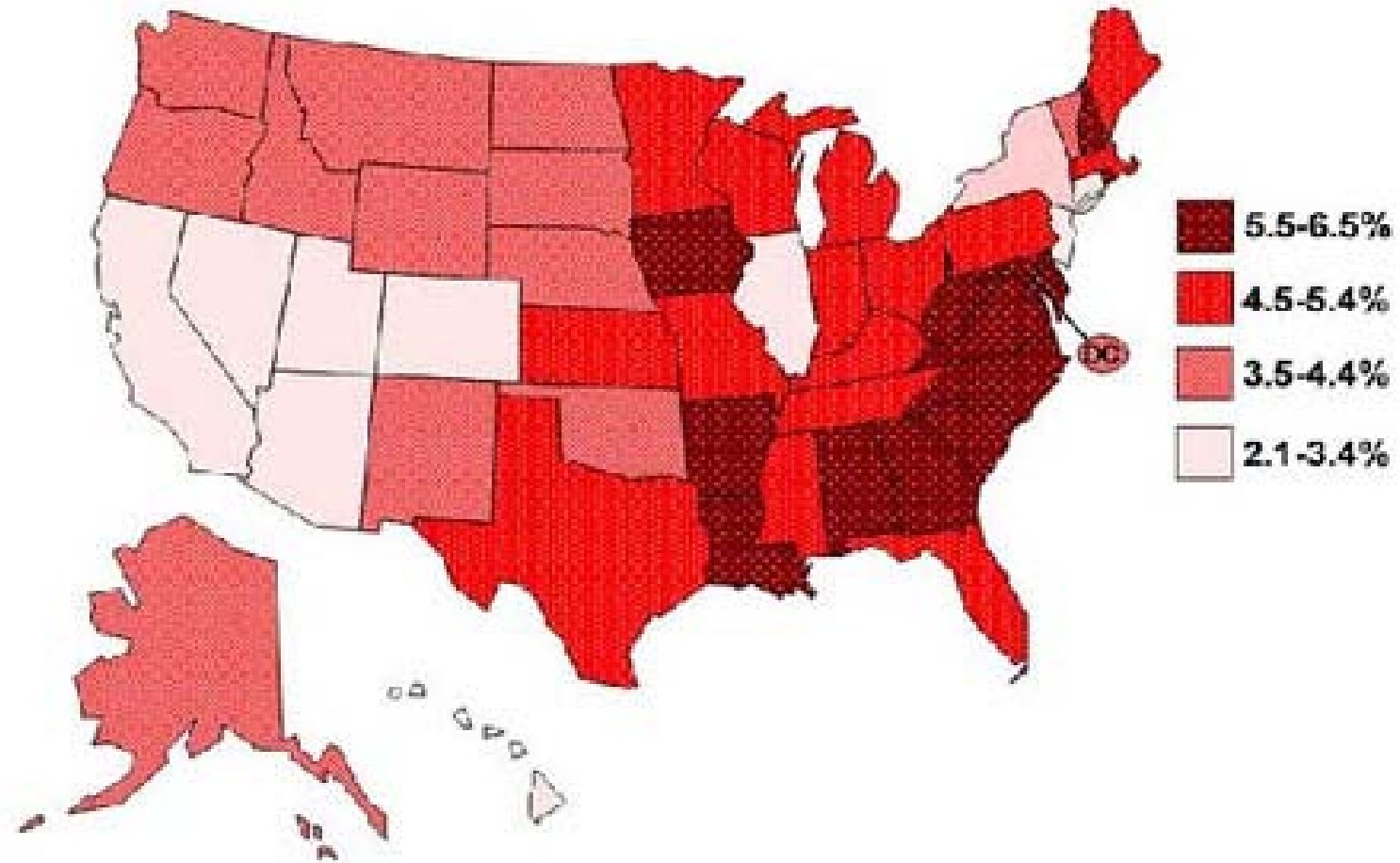


## Age



## Geographic Location

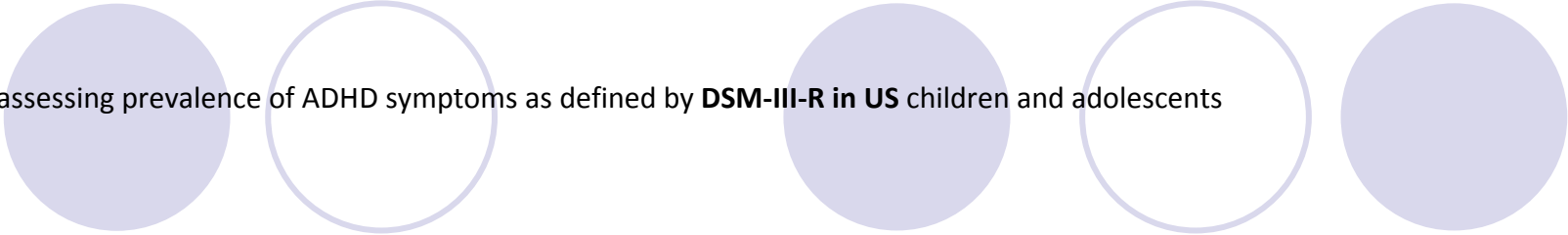




**Table 1**Studies assessing prevalence of ADHD symptoms as defined by **DSM-III in US** children and adolescents(4 studies)

Author(s)	Assessment	Informant	Prevalence %
Bauermeister <i>et al</i> ( <a href="#">57</a> )	Interview (parent subject)  Report (teacher)	Parent, teacher, subject	9.1
King <i>et al</i> ( <a href="#">27</a> )	Rating scale	Teacher, subject	12
Newcorn <i>et al</i> ( <a href="#">26</a> )	Rating scale	Parent, teacher	18 (teacher) 8 (parent)
Shekim <i>et al</i> ( <a href="#">28</a> )	Interview	Parent, teacher	12 (parent) 4 (subject) 2 (parent and subject)

Studies assessing prevalence of ADHD symptoms as defined by **DSM-III-R in US** children and adolescents



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<b>Author(s)</b>	<b>Assessment</b>	<b>Informant</b>	<b>Prevalence</b>
August and	<b>Rating scale</b>	<b>Teacher</b>	<b>8.6</b>
August <i>et al</i> ( <a href="#">37</a> )	<b>Interview</b>	<b>Subject,</b>	<b>2.8</b>

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**Table 4**

Studies assessing prevalence of ADHD symptoms as defined by **DSM-III-R in non-US** children and adolescents

Country	Informant	Prevalence
		(%)
Canada	Parent, teacher,	8.9 (teacher)
	subject	5.0 (parent)
	(6–11 years)	3.3 (subject)



# Why studies in some world regions report estimates that deviate from the worldwide rate ??.

## Methodology.

- North American researchers had followed the DSM
- European researchers had preferred the ICD

## ICD 10 DSM-IV

- The ICD-10 strictly requires that a child must show symptoms in all three dimensions (inattention, hyperactivity, and impulsivity) and must meet all criteria at home and at school
- DSM-IV is more lenient. It is possible to diagnose a child who shows symptoms in only one dimension (inattention).

???

- The question is whether DSM-IV over identifies ADHD or ICD-10 under identifies ADHD.



# Hyperactivity in Omani Schoolboys

1502 school boys 6-13  
years

7.8% (117) were affected

Marwan Alsharabiti . J of Att. Dis 2008;12(3) 264-269

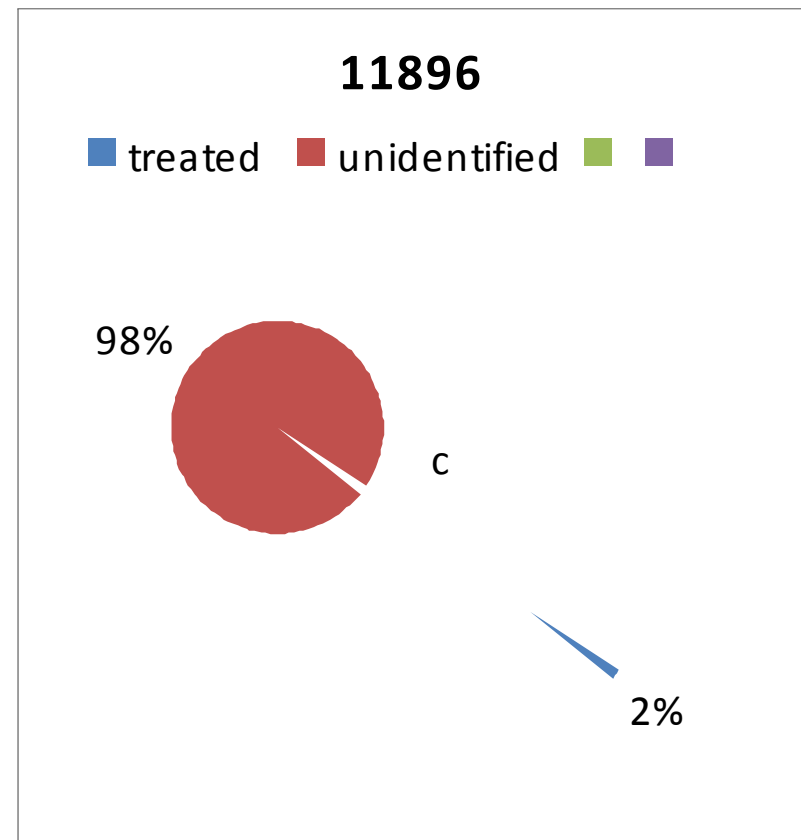
# The prevalence rate of ADHD in Qatar

- A cross sectional study conducted from March 2004-Feb 2005.
- 1541 students (6-12 years) were included.
- Boys (14.1%); Girls (4.4%).
- Prevalence (9.4%).

**A Benner, Razna AlQahtani, Ibrahim A elaal. J Atten Disorder 2006;10:77.**

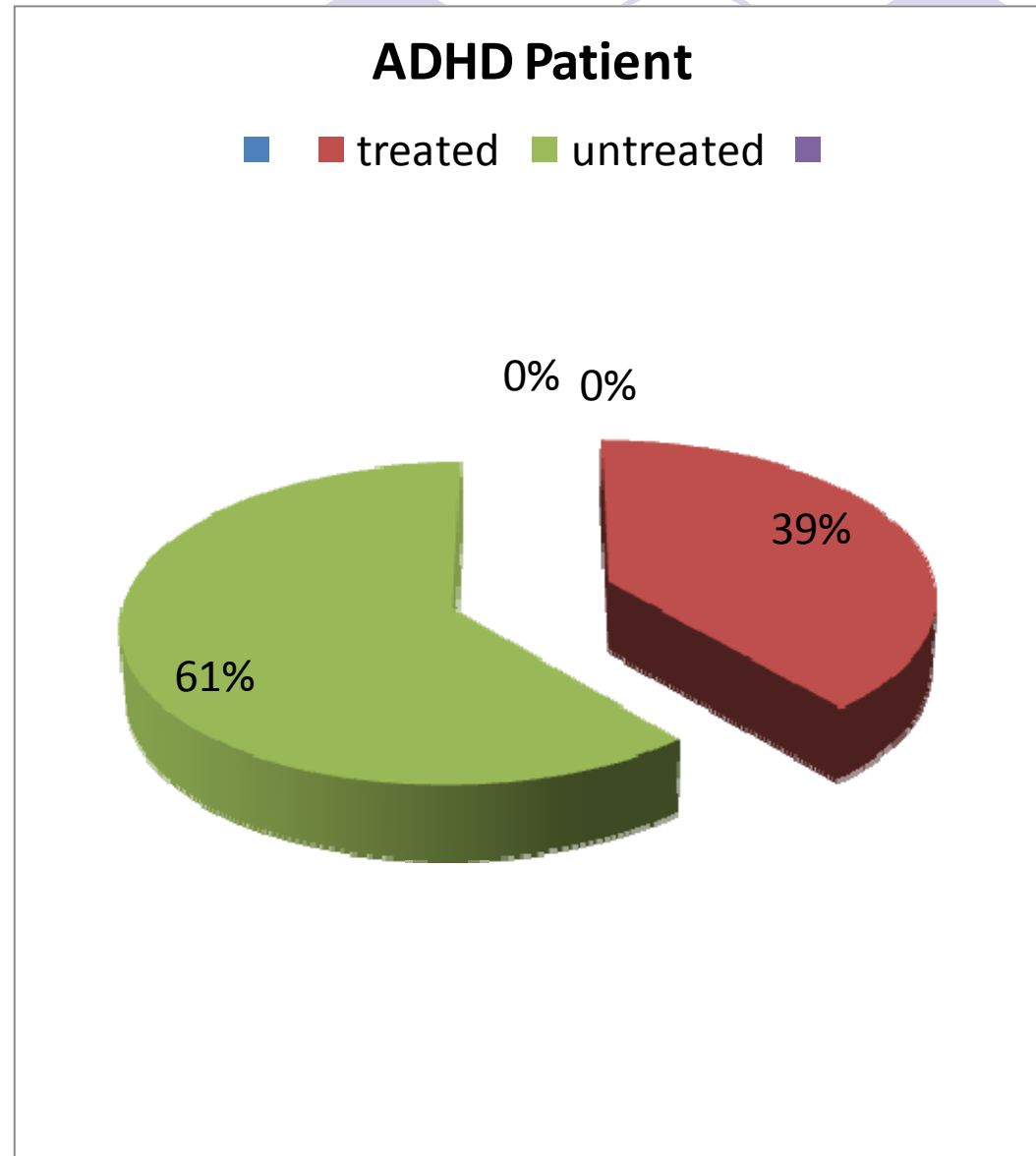
# Expected number of children with ADHD in Qatar.

- Total population of children between 6-12 years ( 80 000).
- 9 % ( 11896 child).
- Treated children in that age group (200)
- (0.15%) or 2% of the affected patients.



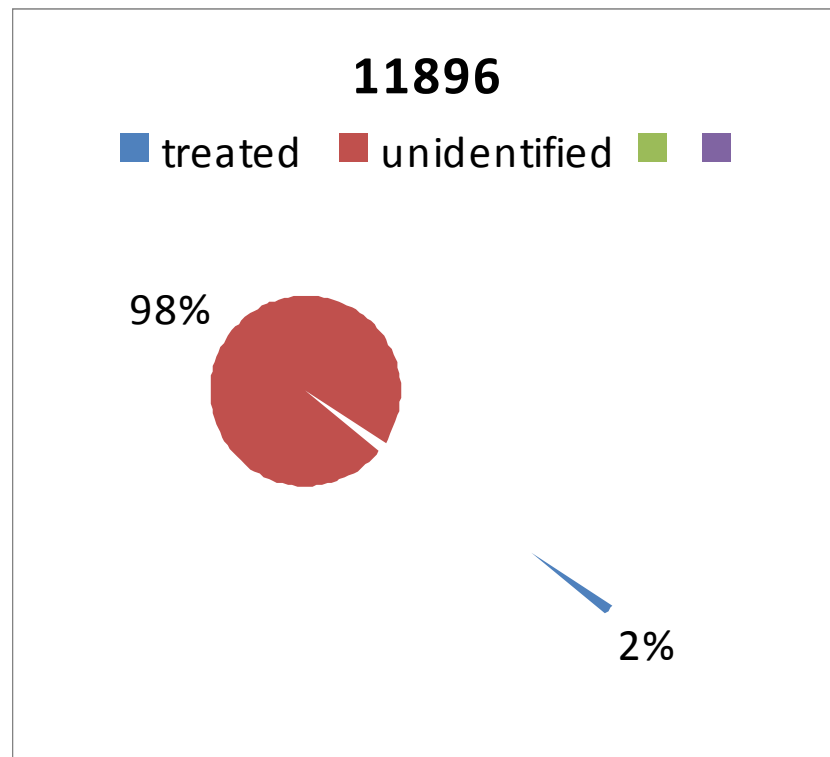
Of the children who met the diagnostic criteria for ADHD, 38.8% had received medication to treat inattention, hyperactivity, in the prior year and 32.0% had been taking medication for most of that year.

Denise Mann. September 04, 2007. University of Pennsylvania School of Medicine.



# Qatar VS USA treatment of ADHD

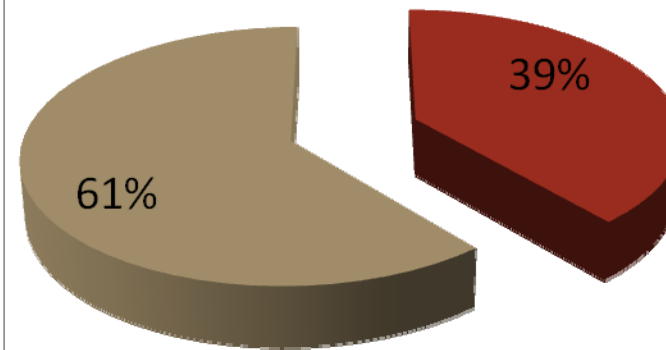
## Qatar



## USA

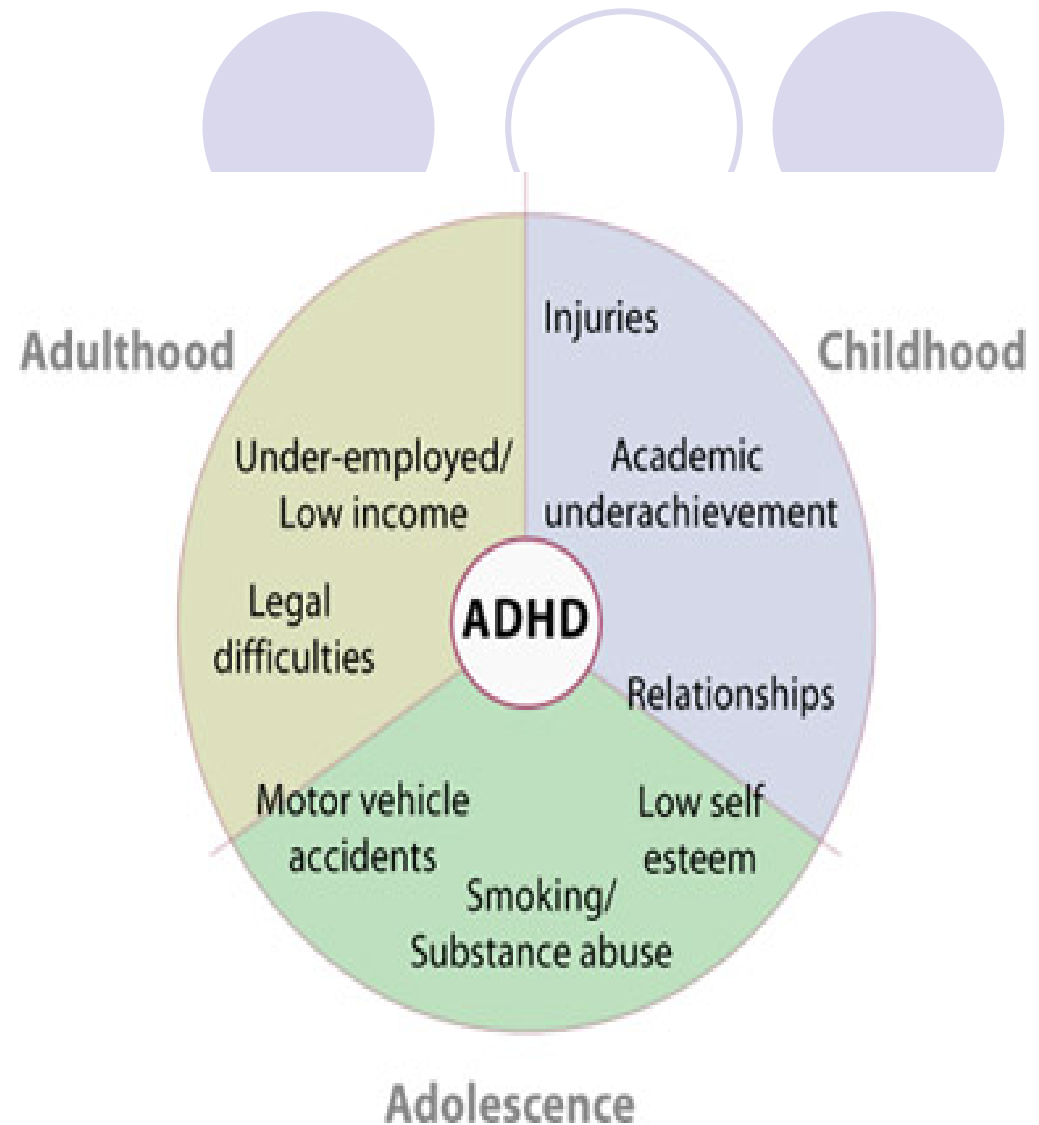
### ADHD Patient

■ ■ treated ■ untreated ■



## Adult ADHD !!!??

As at least 50 % of ADHD children will continue in older age group; estimated percentage of treated adult patients are much lower than pediatrics age group.







# Why we are missing cases?

- Low level of awareness among all levels.
- Teachers, parents, primary care physicians and general pediatricians.
- Absence of a referral center.
- Absence of pathway of management.
- Absence of training workshops for children , parents and teachers.
- Medications prescription limitations.

# Why Teachers are Important

- **Most elementary school classrooms have at least one child with ADHD** (Barkley, 1998).
- **A high percentage of children referred for ADHD evaluations are first identified by teachers** (Pilling, 2000).





## Why Teachers are Important (Continued)

- Teachers are asked to complete rating scales or questionnaires regarding symptoms.
- Teachers are asked to carry out recommended treatment regimens or to monitor effectiveness of treatment (Tannock & Martinussen, 2001).



# Teachers` knowledge

- ADHD viewed as a medicalized phenomenon (Conrad, 1992).
- “Medical gaze” (Foucault, 1976) partially transferred to teachers



# Medicalized phenomenon (Conrad, 1992).

- Hyperactivity is normal.
- Environment and Culture.
- Teachers Characteristics.

# The Albuquerque Journal

March 22, 2007, Page A1

## Parents: Teacher Left Boy In Closet

■ *Rio Rancho educator placed on leave as police investigate*

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Albuquerque Journal

By JAKE RIGDON  
Journal Staff Writer

A Rio Rancho middle school teacher has been placed on leave after allegations that she placed a seventh-grader with attention-deficit disorders in a storage area on two occasions this month.

Rio Rancho police are investigating.

Tanya and George Griego, the parents of the 13-year-old Eagle Ridge Middle School student, say their son was left unsupervised in a "storage closet" both times.

Rio Rancho Public Schools spokes-

woman Kim Vesely said the teacher has been placed on paid administrative leave.

Vesely said she wouldn't characterize the place the parents say the boy was placed as a closet and instead called it a multipurpose area that has been used as a small classroom in the past.

"The investigation (of the alleged incident) is ongoing, and we're working with the family to resolve their concerns," she said. "Obviously, we take this very seriously."

Vesely declined to comment further.

The Griegos told the Journal on Wednesday that their son was kept in what they described as a fairly large storage closet on March 14 for 1½ hours. They said they were told by Eagle Ridge Principal Debby Morrell that their son was placed there because other students had received

permission from their respective parents to go in-line skating.

Tanya Griego said she did not know why or where the other students were skating, adding that school officials did not give her additional details.

The room was not locked. However, the door is difficult to open from the inside, so their son thought it had been locked when he tried to get out, George Griego said. The boy said no one else was in the room at the time, according to his parents.

The Griegos went to the school Friday with a Rio Rancho police officer after discussing the incident with Morrell and the teacher who allegedly put the child in the storage area.

They said they learned their son had been placed in the area again by the same teacher earlier that day, for

See PARENTS on PAGE A2

from PAGE A1

45 minutes. They said they were not given a reason.

"At that point, I asked the officer to arrest the teacher, begged him to do it, but (the officer) ... would only say that the case would have to go through the (District Attorney's Office) to see if they could press charges against the teacher," Tanya Griego said.

Rio Rancho Department of Public Safety spokesman John Francis said the incident is under investigation.

Morrell did not return a phone message left at her school Wednesday.

The Griegos said their child has severe-anxiety disorder, attention-deficit disorder and obsessive-compulsive disorder. It's difficult, they said, for him to sit still even for a few seconds.

They said their son was placed in a "behavior room" earlier this school year with

children who have similar challenges. He was in a different room with a teacher who commonly works with developmentally disabled children at the time of the alleged incidents last week.

Tanya Griego said she was told she was being overly protective when she complained about previous incidents at the school involving her son.

This is not the first time the Griegos have been upset with the district over issues involving their children.

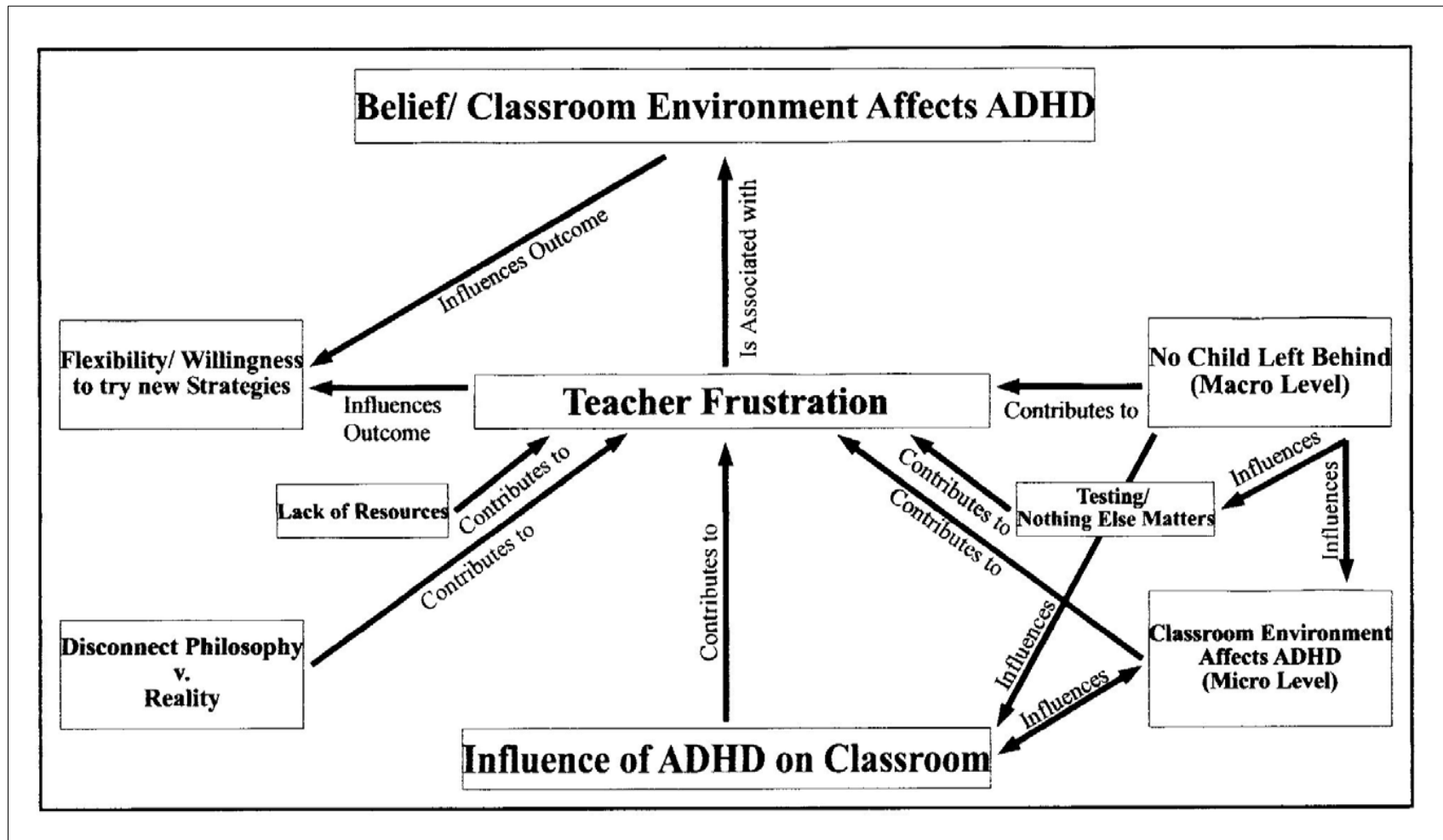
About four years ago, the Griegos' daughter, then a ninth-grader at Rio Rancho Mid-High School, was told she would be suspended because she had dyed her bangs and hair tips pink. The school's handbook at one time prohibited students from dying their hair an "unnatural color."

That policy was changed, Tanya Griego said.





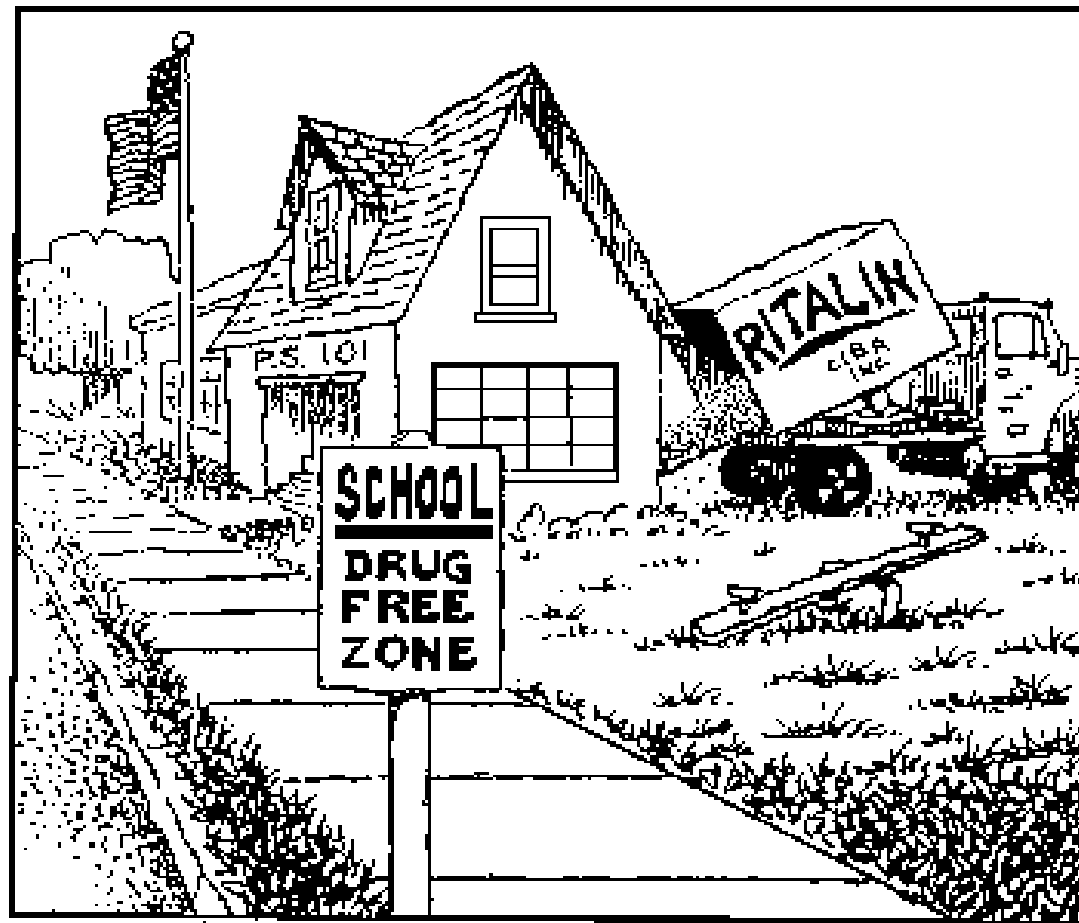
# The School Environment and ADHD



# The Influence of Knowledge on Beliefs and Values about ADHD

- Teachers with higher knowledge seemed to have
  1. Positive general beliefs about children with ADHD
  2. Confidence in the diagnosis.
  3. Willingness to support the use of stimulant medication in children with ADHD.
  4. Flexibility in using various teaching strategies.





# Questions

