

## The Top 10 Issues in Pediatrics

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Selekman's top 10 health issues impacting today's children

- #10. Pediatric Nursing (the Specialty and the Education) has changed
- Nursing has given everything away.
    - What can nurses do that no one else can do
      - ASSESS and TEACH
    - We gave away OT and PT, nutrition, speech, respiratory therapy, skills, social service
    - NOW **WE NEED TO TAKE IT BACK**
    - We must have the knowledge of what they all do
  - Most Pediatric CNS programs converted to NPs
    - They are not the same; the focus is different; now they are going back
      - Although they are both APNs and they are both clinical master's degrees
    - **Who will teach the next generation?**

### Changes in Pediatric Education

- Schools have decreased or eliminated pediatrics
  - Watered-down textbooks
  - Limited clinical experience
  - Very few pediatric questions on NCLEX
  - Fewer quality pediatric inpatient units
  - Fewer qualified pediatric nursing faculty
- What would you be doing if you hadn't had pediatric nursing in nursing school or been exposed to children and families?
- How could you be a quality pediatric nurse if you didn't understand growth and development?

### Changes in care

- NPO after midnight does not imply knowledge of growth and development
  - Clear liquids 2 hours before and light meal 6-8 hours
- Pre-op preparation helps
  - But it is no longer fiscally responsible
- NG placement is best checked by x-ray and next-best by checking pH, but not always safe or possible
- Buretrols and mist tents are out
- PRN pain medication post op is out
- Suctioning has improved and we now cause less damage
- Changes in concussion management

Therefore, the future of pediatric nursing as a specialty and the future of quality pediatric nurses is in jeopardy

#### #9 Accidents/ Child Safety

- Accidents are the #1 cause of morbidity and mortality in children
- Motor vehicle accidents cause 31.3% of teen deaths
  - High risk behavior
- Other major causes of death by unintentional injury
  - Drowning; Firearms; Suffocation; Poisoning; Fire and burns; Falls

#### #8 Obesity

- 19% of children and 17% of adolescents are obese (was 16% in 2005)
  - Doubling of school age since 1980
  - Tripling of adolescents
  - Type 2 diabetes now makes up 45% of children with diabetes
- 31.6% are overweight
- 14.6% of preschoolers are overweight
- No Child Left Behind vs. No Child Left on their Behind!!!

#### Change in BMI

##### New Method

- >95% = obese (Class III = BMI > 40)
- 85% - 95% = overweight (Class I = BMI 30-34.9; Class II = BMI 35-39.9)
- 5% - 84% = normal
- <5% = underweight

#### Hypertension

- 3.2% of adolescents have hypertension
- 15.7% have pre-hypertension
- 26% of those with hypertension are missed
- Hyperlipidemia (20% of teens) and Hypercholesterolemia
- Coronary artery disease in their 30s

#7 infections continue to be a cause of morbidity and mortality...but alterations in immune function are becoming more common

#### Adolescent immunizations

- Tdap
- Menactra against meningococcus and bacterial meningitis
- HPV-Guardasil – first vaccine that can prevent a proven form of cancer

#### Altered Immunity

- The overprescribing of antibiotics
  - Antibiotic resistant organisms
- Antibiotics in the drinking water
- Swine Flu – 2009 (Novel H1N1) (A/California/04/2009 H1N1)
- MRSA (Community acquired vs. hospital acquired)
- VRSA and C. diff

## Increasing allergies

- 1:5 Americans are allergic
- Allergy is the most common chronic condition
- 1:25 children has a food allergy
- Peanut allergies have doubled since 1997
- Causes???
  - Hygiene theory
  - Topical ointments and soy
  - Early introduction
  - Maternal transmission of the proteins

## #6. Increasing Numbers of Children with Chronic Conditions

- Children with chronic conditions are living into adulthood
- 18% qualify for special education
- **32% have a chronic condition**
  - 9% have Asthma
  - 8.9% have LD; 7.8% have ADHD
  - Mental retardation has a new name: Intellectual and Developmental Disability (as of 2/07)
- Civil Rights Laws for those with Disabilities
  - Education for all Handicapped Children Act (now **Individuals with Disabilities Education Improvement Act**)
  - **Section 504** of the Rehabilitation Act
  - Americans with Disabilities Act
  - No Child Left Behind
- Kids are now going to school with:
  - Ventilators and trachs
  - Peg tubes, G-tubes, and other feeding devices
  - Central lines
  - Cochlear implants
  - Shunts
  - Wheelchairs
  - Implants for insulin pumps, pacemakers, and seizure prevention
  - Ostomies, catheters, and other appendages or artificial connections!

MUST communicate between hospital, primary care, and the school nurse

- HIPAA does not prevent communication deemed necessary for continuity of care
- Triplicate discharge forms
- Transitioning and empowerment
  - Transition between stages of development
  - Transition to adult care
  - Empower them to know about their condition and what their needs are

#### #5. Puberty is coming earlier

- Precocious Puberty
  - <7 for Caucasians
    - 6.7 % had pubertal signs by age 7
  - <6 for African-Americans
    - 27.2% had pubertal signs by age 7
    - (breast development or pubic hair)
- Tweens = 11-14 (50% date)

#### Puberty 1991 vs 2006

Breast growth: 10.88 years in 1991 vs. 9.86 in 2006

Menstruation: 13.42 years in 1991 vs. 13.13 in 2006

However, we haven't changed when sex education is taught!

- Parents still don't know WHAT to teach
- Parents don't know HOW to teach it
- Parents don't know WHEN to teach it

#### Sex Education must occur earlier, comprehensively, and consistently

- 58.8% of middle schools and 60.8% of high schools teach human sexuality
- Only 38 states mandate STD/HIV education
- 97% of parents want sex ed taught in the schools

#### #4 High risk behaviors are becoming riskier

##### Adolescent Sexual intercourse

- 46.7 → 47.8% ever had intercourse (2005 vs.2007)
- 6.2 → 7.1% had intercourse before age 13 (2005 vs.2007)
- 15,000 children UNDER age 14 get pregnant each year (6400 births)
- 435,436 teens delivered babies in 2006 (750,000 pregnancies)
- 63% → 61.5% who have sex use a condom; 17% → 16% use the pill (2005 vs.2007)
- >22% used drugs or alcohol before sex
- STDs occur in 1:4 teens
  - Almost 1:2 for Black teens

#### **Teen birth rate increased in 2006 for the first time since 1991**

- **Increased 3% from 40.5 live births/1000 females ages 15-19 to 41.9**
- **This increase continued in 2007**
- 42.5/1000 (but unchanged in the 10-14)

#### Smoking is down

- 70% of teens in 1990s; 58.4% in 2003 had ever smoked → 54.3% (2005) → 50.3 (2007) (Males = females)
- (2007) 14.2% smoked before age 13
- 23% of high school students in month before study 2005; 20% 2007 (but 25.7% use tobacco products)
- 2007 – 20.2% of US adults smoked. Therefore, few become smokers after 18

### Teen use of Performance Enhancing Drugs

- 6.1% used steroids in 2003;
  - now = 5.1% for males and 2.7% females
- BUT - many other performance enhancing drugs are used – Creatine is the current rage
- Highest use is among 9<sup>th</sup> graders

### Drug and Alcohol use

- 25% → 22.3% (2007) of high school students were offered/ sold or were given illegal drugs on school property in past year
- 13% of 8<sup>th</sup> graders and 36% of 12<sup>th</sup> graders used illegal drugs in 2007 (a significant decrease)
  - No change in cocaine use
  - No change in over the counter and prescription drug abuse
- 44.7% drank alcohol in the past 30 days
  - 35.7% of 9<sup>th</sup> graders
  - 23.8% drank before age 13

DARE DOES NOT WORK

### Other concerns:

Kids are doing weirder things to their bodies  
82 deaths from the choking game  
Sexting (sexual texting)  
Gambling  
Video game addiction

### #3. Violence has Increased

- 18% carry a weapon; 5.2% carry a gun
- 5.9% of teens carried a weapon onto school property
- 75% OF SCHOOL SHOOTINGS OVER THE PAST DECADE HAVE BEEN RELATED TO BULLYING
  - Peaks at 7-8 and 11-14
- 10% experience dating violence
- Sexual abuse is up

### Causes of Violence

- Poor conflict resolution skills
- Poor problem solving skills
- NO ABILITY TO DELAY SATISFACTION
- Self centered, egocentric, “It is all about me!”
- NO RESPECT FOR PEOPLE OR PROPERTY

### Causes of Adolescent Mortality

Motor vehicle accidents (31.3%) [high risk behaviors]  
Homicide (but this is leading cause of death among Black teens [53.8%])

## Suicide [Mental health]

### #2. Mental Health Problems have Increased

- 1:10 children and adolescents suffer from mental illness severe enough to cause some level of impairment, but only 1:5 receive specialty services (USPHS, 2000)
- 2007: 28.5% felt sad or hopeless every day for > 2 weeks; 14.5% considered suicide; 6.9% tried it
  - Black Box warnings for antidepressants
    - Can cause an increase in suicidal thinking and behavior
- Adolescent suicide rates have increased, especially among the 10-14 year old group
- Bipolar Disorder is the Disease de jour
  - Increased 40 fold in past decade

### #1 Parents

- Parents don't know how to parent
  - Afraid to set rules for their children
  - Don't know what rules to set
  - Don't have support
  - Too egocentric
- Our goal should be to
  - Teach the parents
  - Empower the parents
  - Reinforce the message with the children