



THE TOP 10 ISSUES AFFECTING PEDIATRIC NURSING

Janice Selekmán DNSc, RN, NCSN
Professor
University of Delaware

SELEKMAN'S TOP 10 HEALTH ISSUES

IMPACTING TODAY'S CHILDREN
AND THE PEOPLE WHO CARE FOR
THEM!



COMMON STRANDS

- Economics, money, economics, money
 - Health insurance
 - How can care be cheaper
- Culture
- Health technology
- Ethics
- The law



#10 ACCIDENTS/ CHILD SAFETY/PREVENTION

- Accidents are the #1 cause of morbidity and mortality in children
- 1/3 of deaths of 1-14 year olds and almost 1/2 of deaths of teens are due to unintentional injury
- Motor vehicle accidents #1 cause of deaths
- Other major causes of death by unintentional injury
 - Drowning
 - Firearms
 - Suffocation
 - Poisoning
 - Fire and burns
 - falls



SO OUR ROLE

- Continue to teach safety
 - Fire, gun, stranger danger, weather, street, car/bike
- Promote laws that are backed by science
 - Helmets
 - Seat belts and car seats
 - Requirements are changed
 - Rear facing back seat until age 2 or weight on seat
 - Front facing rear seat until 40-80 pounds
 - Belt positioning booster until 4 foot 9 inches (between ages 8 and 12)
 - Crib rails
 - Sports equipment



OBESITY

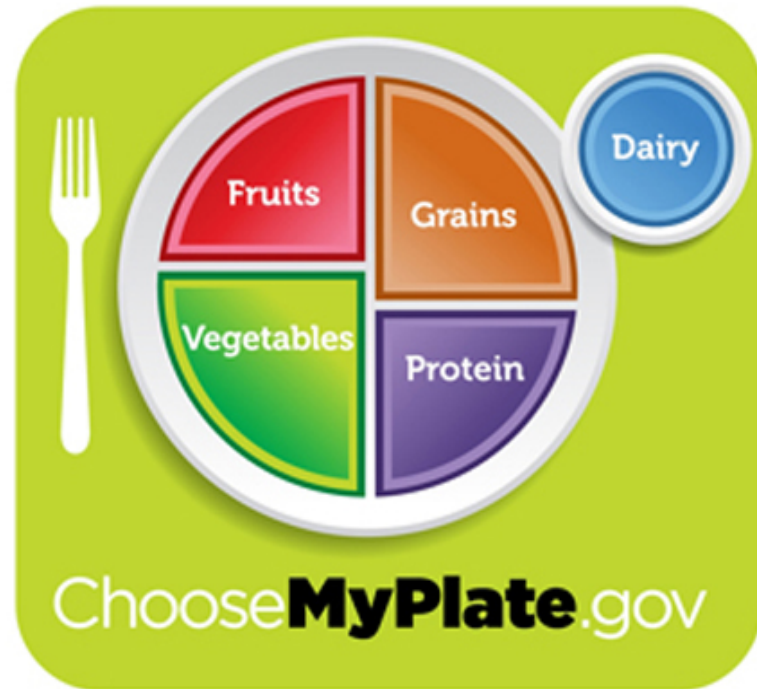
- 31.6% are overweight (BMI \geq 85%)
 - Doubling of school age since 1980
 - Tripling of adolescents
- 10% of infants and toddlers = \geq 95%
- 17% of children and adolescents are obese (BMI \geq 95%)

- Adults:
 - 34% overweight
 - 34% obese
 - 6% extremely obese



INTERVENTIONS

- Maintain weight rather than lose weight
- Increase activity rather than exercise
- Change from the food pyramid to the food plate
- Correct portion sizes
- Skin care
- Personal hygiene
- Body image
 - Hospital gowns
 - Examination tables
 - Wheelchairs
 - BP cuffs
 - IM injections



HYPERTENSION AND MORE

- 3.2% of adolescents have hypertension
- 15.7% have pre-hypertension
- 26% of those with hypertension are missed
- Coronary artery disease in their 30s
 - Hyperlipidemia
 - Increased lipid levels in 12-19 year olds = 20.3%
 - 42% in those who are obese
- Of all children with diabetes, 45% are now type 2



#8 INFECTIONS AND ALTERED IMMUNITY

- Infections continue to be a cause of morbidity and mortality
 - but alterations in immune function are becoming more common
 - MRSA (Community acquired vs. hospital acquired)
 - VRSA
 - C. diff
- The overprescribing of antibiotics
 - Antibiotic resistant organisms
 - Antibiotics in the drinking water
- The Hygiene Hypothesis



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
- Latex allergies have increased
- We know there is a genetic predisposition



IMMUNIZATIONS AGAINST MAJOR DISEASES

- **Diphtheria**
- **Pertussis (whooping cough)**
- **Tetanus**
- **Polio**
- **Rubeola (measles)**
- **Rubella (german measles)**
- **Parotitis (mumps)**
- **Haemophilus influenza, type b**
- **Varicella (chicken pox)**
- **Hepatitis B**
- **Influenza**
- **Meningococcus**
- **Pneumococcus**
- **Hepatitis A**
- **Rotavirus**
- **Human Papilloma Virus**



ADOLESCENT IMMUNIZATIONS

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

- Now there is a push for ADULT immunizations
 - Tdap
 - Shingles
 - influenza



INFLUENZA AND OTHER THREATS

- Swine flu (A/California/04/2009 H1N1)
- Threat of pandemic diseases
 - Bioterrorism
 - Avian flu



#7 THERE ARE 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
 - Impact on insurance/finances and resources



CIVIL RIGHTS FOR THOSE WITH DISABILITIES

- Laws – YOU MUST KNOW THEM!
 - 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
- Remember --- YOU are an **ADVOCATE**



KIDS IN THE SCHOOLS WITH:

- Ventilators
- 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!



COMMUNICATION

- Where is communication between the hospital, clinics and the school nurse
 - HIPAA does not prevent communication deemed necessary for continuity of care
 - Triplicate discharge forms
 - Hospital/ clinic
 - Family
 - School nurse
- Think “continuity of care”



TRANSITIONING AND EMPOWERMENT

- Transition between stages of development
- Transition to adult care
- Empower them to know about their condition and what their needs are



#6 GENETICS / EMBRYOLOGY AND FUTURE IMPLICATIONS

- More conditions are resulting from a genetic etiology
 - Impact on our teaching/ genetic counseling
 - Impact of pharmacogenetics
 - Impact of gene therapies
 - Genomics – the interaction between genetics and the environment
 - How will this affect the next generation?
- Fetal surgery is changing the presentation of congenital conditions.
 - How are symptoms different
 - How does it differ from what is in textbooks



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
 - Of these, 25% say sex is expected when dating



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
- Causes:
 - Obesity (hormone Leptin ???)
 - Environmental factors/ hormones in the foods we eat (chemicals with estrogen-like effects)
 - Health

Pediatrics, 2009



HOWEVER, WE HAVEN'T CHANGED WHEN SEX EDUCATION IS TAUGHT!

- Parents still don't know WHAT to teach
 - We went through an entire generation of 'abstinence only'
- Parents don't know HOW to teach it
- Parents don't know WHEN to teach it

And the school curriculum stays the same
(and what are the hospitals doing for this?)



SEXUAL INTERCOURSE

- 46% of teens have had intercourse
 - 62% by 12th grade
 - 8% males and 3.3% females before age 13
- 5030 births to children 10-14
 - 70 having second child; 3 having 3rd
- 742,990 teens 15-19 got pregnant in 2009
 - 410,000 births
 - 66,000 having second child; 1316 having 4th
- STDs occur in 1:4 teens
 - Almost 1:2 for Black teens



SMOKING IS DOWN

- Decreasing
 - 70% of teens in 1990s; 58.4% in 2003 had ever smoked → 54.3% (2005) → 46.3 (2009)
 - Males = females
- 10.7% smoked before age 13
- 19.5% of high school students in month before study
- 2009 – 22% of US adults smoked. **Therefore, few become smokers after 18**



TEENS USE ANABOLIC STEROIDS OR THEIR PRECURSORS

- 6.1% used steroids in 2003;
 - now = 4.3% for males and 2.2% females
- BUT - many other performance enhancing drugs are used – Creatine is the current rage
- Highest use is among 9th graders



DRUG AND ALCOHOL USE

- **INCREASE in over the counter and prescription drug abuse**
 - 20% teens 'loaned' prescriptions
 - 37% had side effects
 - Most abused = painkillers, antidepressants, stimulants
 - 21% increase in ER visits for reactions
- 41.8% drank alcohol in the past 30 days
 - 31.5% of 9th graders
 - 21.1% drank before age 13
 - DARE DOES NOT WORK
 - Those who drink before age 14 are 4x more likely to become dependent than those who start after age 20



OTHER CONCERNS

- Choking game
- Gambling
- Video game addiction
- **Sexting (sexual texting)**
 - **A huge issue**
 - **Impacts mental health, college entrance, scholarships, the law (pornography)**
 - **<http://www.netsmartz.org>**



#4 VIOLENCE HAS INCREASED

- Weapons
 - 18% carry a weapon; 5.2% carry a gun
 - 5.6% carry a weapon on school property
 - 7.8% threatened or injured with weapon on school property
 - Dating violence (10%)
 - Lockdowns are becoming common
 - Bullying, including cyberbullying
 - Child abuse continues
- 1:4 teen girls have been involved in violent behavior (27%)



HOMICIDE

- **Homicide is 2nd leading cause of death among teens**
 - **But #1 for Black teens [53.8%]**
- Of all deaths in 15-19 year olds, 17% = homicide
- Of all deaths in 10-14 year olds, 6.6% = homicide
- Of all deaths in 5-9 year olds, 4.5 % = homicide
- Of all deaths in 1-4 year olds, 9% = homicide
 - (2011)



CAUSES OF VIOLENCE

- Poor conflict resolution skills
- Poor problem solving skills
- Don't know how to resolve problems without fighting

- **NO ABILITY TO DELAY SATISFACTION**
- Self centered, egocentric, “It is all about me!”

- **NO RESPECT FOR PEOPLE OR PROPERTY**



#3 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
- 2009: 26.1% felt sad or hopeless every day for > 2 weeks; 13.8% considered suicide; 6.3% tried it
 - Black Box warnings for antidepressants
 - Can cause an increase in suicidal thinking and behavior
- 13% of deaths of 15-19 = suicide
- 7% of deaths of 10-14 = suicide



PREVALENCE OF MENTAL DISORDERS

- 13% of 8-15 year olds meet criteria for at least one of 6 mental disorders
 - 8.6% have ADHD
 - 3.7% have depression
 - 2.1% have conduct disorder
 - 0.7% have anxiety disorder
 - 0.1% have an eating disorder
 - (Pediatrics, 2009)



NORTH CAROLINA 2006-7 SCHOOL STATISTICS

- There were 30 suicides
 - 6 were in middle school students
- There were 370 suicide attempts
 - 21 were in elementary school students
- There were 15 homicides



#2 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



EXPECTATIONS OF PARENTS/ GUARDIANS FOR THEIR CHILDREN

- Provide care (feed, shelter, clothe, maintain good health)
- Nurture
- Protect
- Train/ educate
- Develop social skills, including problem solving
- Be primary decision makers within the home
- Be chief interpreters of the wider community and society



EXPECTATIONS (CONTINUED)

- Be role models
- Be a safety valve to reduce social pressures on the child
- Provide stability
- Have rules
- Motivate and support
- 'LOVE' - unconditionally



PEDIATRIC NURSING 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
 - 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 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?



BUT WHAT CAN WE DO???

WE MUST HAVE OUTCOMES

- We MUST show that having a pediatric background makes a difference in the outcomes of the children in our care.
 - We know a BSN makes a difference in outcomes in the hospital setting
 - We must show that having a registered nurse at the bedside and working with children in the community is better for the children, their families and the economy than having a non-nurse do it!
- We must challenge the sacred cows of nursing practice



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 now up to YOU!

I have all the faith in the world that you are up to
the task.

You are professionals

