TAKE THIS JOB and love it...Barb’s BEST BETS for Lovin’ YOUR job

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Barb’s Best Bet--#1—never stop being a student...

• Subscribe to one or two professional journals
• READ THEM
• Attend seminars throughout your nursing career
• “You know Barb, this was the best seminar I have ever been to...of course, I haven’t been to one since I graduated from nursing school 34 years ago...”
• That made me think...
• What if I had stopped learning when I graduated from Nursing School in 1972?
I wouldn’t have learned about the *continuing* miracles of vaccines

• Every other bed in Pediatrics was meningitis, meningitis, meningitis
• The incidence of invasive *Haemophilus influenzae type B (Hib)* meningitis was 40-100 per 100,000 children younger than 5 years old prior to:
  • The vaccine, Prohibit, introduced in 1990
  • Since 1990 the incidence of invasive *Hib* disease has decreased to 1.3 per 100,000
• Lumbar punctures in kids—before, during, after...too many...

We’ve obviously come a long way with vaccines...

• “*But you told me*...”

• In the future...
OF SPECIAL NOTE:

• Of the 30 years of added life expectancy Americans have enjoyed in the past 25 years, **ONLY 5 years were added by advances in clinical medicine** (MRIs, CT scans, PET scans)
• The majority of the gains in life expectancy were the result of **public health interventions** such as improvements in water quality, sanitation, and food safety **AND** in the **development of a broad array of vaccines** (Bartecchi)

If I had stopped learning in 1972, I would still think neurons could NEVER regenerate...

• Dr. Spickerman— “*Girls...*”
• The discovery of neuronal stem cells, neurogenesis, the hippocampus
• November 1998
• Eureka!
• How can we boost neurogenesis?
Say YES to drugs...

• Antidepressants
• The “Statins”
• Lithium
• Metformin

• How else can we build neurons?

Get up on that treadmill!

• It’s never too late to start exercising!
Meditation...and the monks...

- Find a nice quiet environment
- Close your eyes
- Deep breaths
- Relax muscles
- “Oingy-boingy, oingy-boingy, oingy-boingy”

Sleep, glorious sleep...

- Sleeps boosts neurogenesis, synaptogenesis, and dendritogenesis!
- More than 6 hours, less than 9 hours
- Sleep not only helps to lay down new information, it also helps to clean up from the day’s activities
- Glymphatic system
Sex boosts neurogenesis!

• Well, in rats anyway.
• Rats seem to have all the fun...but the Joys of Rat Sex demonstrate increased neurogenesis and increased dendritogenesis with frequent sex
• Intense sex for 10 minutes; break; back at it again for 10 – 12 times
• However, after each encounter the male rat needed a bit more time to recover, UNLESS a new female rat is introduced into the cage

Known as the Coolidge effect

• Why is it known as the “Coolidge effect”? President Calvin Coolidge and his wife, Grace were visiting a chicken farm during the 1924 re-election campaign
• Grace noticed the sexual vigor of a prize rooster and asked the tour guide about the number of sexual encounters per day
• “at least 20” was the answer...she told the guide to mention that to her husband, Calvin.
The Coolidge effect

• When President Coolidge heard this statistic he asked, “Was it with the same hen every time?”
• The guide commented that, to the contrary, it was with a different hen every time.
• President Coolidge asked the guide to convey THAT bit of information to Mrs. Coolidge...
• **Anyway, BOTTOM LINE---rat sex boosts new neurons**

If I had stopped learning...I wouldn’t have thought that white matter matters...

• Gray matter was the only matter that mattered when I was in Nursing school...never made sense to me that the white matter (myelin pathways) didn’t matter
• It doesn’t do you any good to have 100 billion neurons if they can’t send information throughout the nervous system
• What keeps the pathways healthy?
• Use ‘em
What else keeps the pathways healthy?

• Blueberries and olive oil

• Omega-3 fatty acids
What else keeps the pathways healthy?

• Vitamin B12
• Growth and differentiation of RBCs in the bone marrow
• Maintenance of CNS myelin, PNS myelin, and is a co-factor in the production of serotonin (happy)
• Not enough B12? You’re anemic, demented, depressed with a peripheral neuropathy

How do you get B12?

• Foods high in B12? Animal protein, eggs, fortified foods (cereals), vitamin supplements
• B12 then binds to Intrinsic factor, a glycoprotein in the stomach
• IF + B12 tumbles into the small intestine to be absorbed in the ileum
• It is then transported to liver for storage, to the bone marrow for RBC production, and the nervous system for the maintenance of the CNS and the PNS
So who is at risk for a B12 deficiency?

- AGE: Over 55 (problems with absorption)
- DIET: No animal protein in diet—vegetarians, vegans, Tea and Toasters, alcoholics
- LIVER: Liver failure
- GI: lack of intrinsic factor due to autoimmune disease (pernicious anemia, malabsorption (Crohn’s disease, celiac disease, gastric by-pass surgery)
- DRUGS: Metformin, Proton Pump Inhibitors

B12 deficiency—range is 200-11 pg/ml

- However, 5-10% of people who have B12 levels less than 350 pg/mL may be symptomatic
- SO, how can we replace B12? 4 ways...
- The 4 S’s
- How much?
- Can you overdose on B12?
- No, the one dreaded side effect of too much B12 is:
If I had stopped learning in 1972 I would still think that tampons cause staphylococcal TSS

- The tampon wars in the late 70s
- Who won? Proctor and Gamble and RELY™
- You could “RELY” on RELY™ to...
- Super, dooper, dooper absorbent tampons
- 39 deaths; thousands ill
- You could get it in, but ya’ couldn’t get it out!

I would still think that stress causes ulcers!

- Drs. Barry Marshall and Robin Warren and the discovery of *Helicobacter pylori* in 1983
- The old treatment? Two ounces of milk alternating with two ounces of Maalox every two hours
- The new treatment? Antibiotics and PPIs
- NSAIDS are also a major culprit
I wouldn’t have known that the fastest rising group with STIs are the over 65 crowd...

• In fact, STIs have increased by over 300% in this age group
• WHY?
• *(The Medical Post, October 2001)*

The Pfizer riser ...November 1, 1998

• Sildenafil (Viagra)
• The little blue pill that changed the lives of millions
• Before 1998
• After 1998
• 2003—vardenafil (Levitra) and tadalafil (Cialis)
• 2013—avanafil (Stendra)
• Commercial pilots
BABY BOOMERS GONE WILD!!

• Incidence of syphilis is up 52%, Chlamydia up 32%; most prevalent in retirement communities—Arizona reported a 87% rise in STDs from 2005-2009; Central Florida 71% rise, Southern Florida 60% rise...
• Medicare now offers free STD screening for Seniors but only 5% have taken advantage...

“Back in the day...”

• It was called VD—venereal disease...from the “Goddess of LOVE”...
• And there were only 2! Gonorrhea and syphilis!!
• Name change to STD...then to STI...and now there are a slew of them
• Anything with an H_V ... HIV, HSV, HPV, HBV, HCV
• ZIKA!! Yikes...
• Chlamydia still
• Trich or Treat...
If I had stopped learning I would still think that we only had 3 types of hepatitis

- Hepatitis A
- Hepatitis B
- And Hepatitis Non-A, Non-B

- Discovered the actual non-A, non-B virus in 1987—and it took them 2 years to NAME IT!!
  - 😁
  - Hepatitis C!!

Boomers beware!

- Highest risk group if you were born between 1945-1965
- Get tested!
**Major game-changer—the new oral drugs for HCV**

- 4-drug antiviral combination – Viekira Pak -- 4 tablets per day x 12 weeks...$83,320
- Harvoni (2 drugs combined; sofosbuvir and ledipasvir) – 1 tablet per day x 12 weeks ... $94,500—CURE at least 94% of the patients with genotype 1 (the main type in U.S.)
- Zepatier ($55,000)
- And the newest:
  - Epclusa ($75,000)

**Kidney transplants were hot in 1972**

- Today it’s **Fecal** transplants for chronic *C. difficile*
- Any donor will do...
- Donor bank of graduate students from MIT and Harvard
I would still be calling diabetes...

- ‘SUGAR DIABETES’
- Juvenile Onset Diabetes Mellitus (JODM)
- Adult Onset Diabetes Mellitus (AODM)
- Insulin Dependent Diabetes Mellitus (IDDM)
- Non-insulin Dependent Diabetes Mellitus (NIDDM)
- Type I (Roman numeral used)
- Type II (Roman numeral used)
- Type 1 (Arabic number)
- Type 2 (Arabic number)

And, it’s not thaaaaaat easy either...other types...

- Type 1A (autoimmune)
- Type 1B (idiopathic)
- LADA (10%) (latent autoimmune diabetes in adults)—also referred to as Type 1.5
- MODY (1-2%) (maturity onset diabetes of the young)—monogeneic (6 types)

- And all they taught me in Nursing School was foot care!
Why the increase in numbers? Hmmmmm....

• Weight gain

• In some areas, 50% of all new Pediatric cases of diabetes are Type 2!

• Hop up on that scale....

It’s not only weight, it’s also waist size!

• If I had stopped learning in 1972 I wouldn’t have realized that I could grow a NEW ORGAN!!

• BELLY FAT...is considered a brand, new metabolic organ!

• Measuring your waist size can give you an idea of how big your new organ might be!

• What should it be?
Ladies...35 inches or less

- Actually ½ of your height is a better measure

Best way to reduce belly fat? Get BACK up on that treadmill! Ladies? First thing to go?
I would certainly NEVER have thought we would live so long!

So, Barb’s Best Bet #1...

• Don’t stop being a student—ever!
Barb’s Best Bet #2—Learn from your patients, regardless of their age...

• First there was “Tracy”—age 18 months
• Nephrotic syndrome
• Lasix and ears

Embryology

• How much embryology did I get in nursing school?
• The sperm meets the egg...and then...
The ears and the kidneys

- Derived from the same tissue embryologically
- Otorenal axis
- Nephrotoxicity
- Ototoxicity

And then there was Homer...

- Ms. Bancroft, can I ask you a question?
Barb’s Best Bet #3—Learn that we all make “misteaks”...learn from them...

INVESTIGATIVE REPORT
DANGEROUS CARE: NURSES’ HIDDEN ROLE IN MEDICAL ERROR

Nursing accidents unleash silent killer

Barb as “head nurse” for the day
Barb’s Best Bet #4—Be curious…challenge your colleagues; ask questions, ask why?

- Why do they call the ovaries oophers? Why do you put oocytes in your oophers?

Barb’s Best Bet #4—Be curious…ask questions

- Well then, just how many eggs do we get?
  - At 6 months gestation ______________
  - At birth ______________
  - At age 30 ___________
  - At age 51.3 __
  - Primary ovarian failure and menopause

- The age of an egg is YOUR age! Which leads me to...
Barb’s Best Bet #5—Learn to work and play well with others...

• The art of healing is a collaborative art—the team needs to work well with each other

Mutual respect...

• Have a healthy dose of mutual respect for your colleagues—everyone has something to offer whether it’s a...
• Physician, Social Worker, Registered Dietician, Respiratory Therapist, Physical therapist, Pharmacist, Housekeeper, Maintenance
• Maintain a cultural humility with our patients and co-workers—learn about their customs, religions—Ramadan, Kwanzaa, Hanukkah, Christmas 😊
• David @4 – Jewish father, Christian Mom—raised with both religions—“I’m half Jewish and half Christmas”...
Physician-Nurse relationships...

• You are NOT “JUST A NURSE”!
• You have a brain—use it!
• If you don’t know something—look it up NOT IN REDBOOK OR MARTHA STEWART LIVING OR the USA Today...
• THEN offer your suggestions and observations
• Back it up with research—COUP syndrome

Barb’s Best Bet #6—Stay healthy! Practice what you preach!
Get regular check-ups—age- and gender-specific

• Blood pressure screenings
• Hemoglobin A1C
• Lipid Profile
• TSH
• B12 levels

Don’t forget your “mammiograms”
Gentlemen?

• Comments from patients during prostate exams:
  (Dr. James Ralph)
• “Could you write me a note for my wife, saying that my head is not, in fact, up there?”

And your colonoscopies starting at age 50

• Or earlier if you have a positive family history
• Schedule early a.m. colonoscopies

• Report any changes in bowel habits
• Yearly stool testing
Barb’s Best Bet #7—Unstress for Success!

- Suppresses the immune system
- Stress decreases serotonin—contributing to depression
- Stress decreases norepinephrine—contributes to decreased energy
- Stress moves fat around the middle—contributing to your “new organ”...
- Stress kills neurons of the hippocampus—”I can’t remember anything”...
- Stress moves calcium from bones—osteopenia/porosis
- Stress increases cortisol — stimulates appetite

Humor...is laughter the best “stress reducing” medicine? You bet.

- Laughter decreases cortisol
- Boosts the immune system
- Boosts endorphins
- Boosts serotonin
- Burns calories
- Watch humor videos
- Read funny books!
- Humor as a way of coping with our work
I seem to be able to find humor in just about everything...

**ALERT:** The latest CDC bulletin on the avian (bird) flu...just released...

• A list of the symptoms of bird flu. If you experience any of the following, please seek medical treatment *immediately.*
Reduce stress!! Hang around people that make you happy...

• Happiness is contagious
• Mirror neurons (discovered during the “decade of the brain—1990-2000)

Negativity is contagious

• Bad attitudes and negative attitudes are contagious—
• Mirror neurons
• Depression – if within 10 minutes...
Decrease stress! Exercise...Get a pet

Reduce stress! Get out in the sun!

- Slap a dermatologist today—OSTEOPOROSIS epidemic
- Slap a sunphobic MOM today
- Kids need sunlight...
Sunlight—the double-edged sword

• ON ONE HAND...
• 15 minutes 3-4 times a week, WITHOUT sunscreen pumps up your bone matrix via vitamin D production
• In small doses sunlight boosts endorphins, increases serotonin, increases norepinephrine
• Pumps up the immune response
• Boosts bone and joint strength
• Boosts vitamin D production—cancer protection...especially colon, breast, ovarian, and prostate...
• GUYS!!

Sunlight—the double-edged sword

• On the other hand...
• SKIN CANCER...so get out in the sun to get your vitamin D and then?
• Slather yourself with sunscreen to protect yourself from skin cancer
Back to sleep!

- In addition to boosting neurogenesis...sleep also...
- Boosts immune system
- Boosts memory
- Decreases cortisol
- Boosts melatonin
- Increases serotonin and norepinephrine
- Decreases appetite
- Decreases insulin resistance

Turn off the TV...

- Nuthin’ but bad news!
- Violence
- Politics
- War
- Violence
- Politics
- War
Back to meditation...

Good news about stress? There’s a light at the end of that tunnel...

• Stress-induced changes in behavior and brain appear to be reversible
• Atrophied synaptic connections in the decisive regions of the frontal cortex resprouted (plasticity)—reversible remodeling occurs
• CHANGE your environment, take a vacation, take a hike, take a couple of “mental health” days, take a breath,
• And, when all else fails, take a pill to reduce stress...
Thank you!!

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