HOW TO PREVENT, REDUCE AND COPE WITH STRESS
About Jim

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- University of Illinois Chicago – BS in Kinesiology
- 20+ years of exp. in Clinical Rehabilitation
- 10+ years of exp. within Occupational Health
- 8+ years of experience with ATI Physical Therapy
  - Senior Regional Director, Clinic Operations
- 5+ years of experience with ATI Worksite Solutions
  - Operational Director overseeing 75+ staff who deliver early intervention services to industry
STRESS MESS IN U.S.

- 48% CAN'T SLEEP
STRESS
Lack of Sleep
STRESS
Lack of Sleep
Increased alcohol
Increased food
Decreased exercise
Money concerns
Fights with family
Identify the sources of stress:

- Habits - “I’m too busy to sit down”
  - Taking NO time for yourself

- Attitude - “My life is always crazy”
  - Letting life run YOU

- Excuses - “It’s my bosses fault, he is giving me too much work”
  - Allowing someone ELSE to take control
Signs of STRESS

- Shallow breathing
- Grinding or clinching teeth
- Short/Abrupt answers
- Poor Sleeping habits
- Increased alcohol intake
- Weight gain or loss
Managing Workplace Stress

No one's job is stress-free

- Focus on tasks ahead
- Don’t worry about tasks that are already done
- Time management/organization
- Open communication with co-workers and management
- Frequent staff meetings
- Take control over your situation
- Avoid the stressor
Managing Stress at Home

- Open communication with all family members
- Daily family schedule to keep everyone organized
- Make sure you are getting 7-9 hrs. of sleep each night
- Eat well and exercise
- Relax
The Don’t’s of Dealing with Stress

- Smoking
- Drinking Caffeine and Alcohol
- Taking pills to relax
- Too much TV or computer time
- Procrastination
Side Effects of Stress

- Weight Gain
- High Blood Pressure
- Increased risk for heart attack and stroke
- Irritability
- Sleep Deprivation
Healthy Ways to Relax

- Go for a walk
- Play with children and pets
- Gardening and house work
- Massage
- Watch a funny movie
- Spend time with positive people
- Take a vacation
- Read a good book
Common Dreams and their meaning

- Back at school and
  - Your lost
  - Not ready for a test
  - Can’t remember you locker combination

YOU’RE STRESSED
Sleep Deprivation

Shift Work Sleep Disorder
Are you Sleep Deprived?
Answer YES to 3 of these questions and YOU ARE!

- Need an alarm clock to wake you up?
- Struggle to get out of bed each day?
- Hit the snooze button?
- Tired, irritable and stressed?
- Trouble concentrating and remembering?
- Feel drowsy while driving?
- Do you sleep extra hours on weekends?
Sleep Deprivation Statistics

- 41 million American workers aren’t getting the recommended amount of sleep.
- Many workers get less than 6 hours of sleep each night putting themselves and co-workers at risk.
Shift Work Sleep Disorder

SWSD- is a disorder that affects people who frequently rotate shifts. This disorder is most common in people who work 10pm-6am.
Side Effects/Symptoms of SWSD

- Difficulty concentrating
- Headaches
- Lack of energy
- Obesity
- Diabetes
- Cardiovascular problems
- Stress
- Absenteeism
How to decrease the effects of SWSD

- Make it a priority to get 7-9 hours of sleep each day
- Try to avoid working prolonged shifts
- Avoid long commutes
- Avoid frequent rotating shifts
- Get enough sleep on your days off
- Avoid caffeine, alcohol and nicotine
GENERAL LESSONS ABOUT SLEEP
Myth #1: It is easy to adjust to a different sleep schedule.

Fact: Your biological clock keeps you alert during the day and drowsy at night
- Even night shift workers tend to feel sleepy at night
- It takes more than a week to adjust to an altered sleep/wake cycle
- Your biological clock resets but only by about 1-2 hours per day at best
Myth #2: Getting an hour less sleep per night than needed will not affect daytime functioning.

Fact: Lack of sleep may impair your ability to think properly and respond quickly.

A loss of an hour of sleep cumulated over several nights = sleep debt that compromises
- cardiovascular health,
- energy balance and
- body’s ability to fight infections
Myth #3: Getting more sleep on the weekends can make up for lost sleep during the week.

- Fact: This may offer partial relief
- Will not improve impaired performances throughout the week
- Excess sleep on the weekend may make it even harder for you to wake up on Monday
Power Naps – do they work

- Last ~ 1 hour
- Sleep stages 1 and 2
- Result in increased alertness
How to promote good sleep habits

- Go to sleep at the same time every night
- Get up at the same time every day
- Make sure your bedroom is dark and quiet
- Avoid bright lights and TV in bedroom
- Avoid alcohol and caffeine before bed
- Don’t hit the snooze button
Driver Fatigue Management Tips

- Get sufficient rest
- Avoid alcohol, large meals
- Establish a realistic driving plan
  - Take frequent breaks — every 2 hours!
- Stay hydrated and get lots of fresh air
- Share the driving
- • When driving, take a break at least every two hours.
"The amount of sleep required by the average person is five minutes more." ~Wilson Mizener
ERGONOMICS AND
THE AGING WORKFORCE

Presented by:  Jim Allivato, ATC, CEIS
Director of Operations, ATI Worksite Solutions
Exception or Norm?
What Is Driving This Change

- Injury history in facilities today
- Demographic make-up of today's employers
- Significant need to control healthcare and WC cost
Workplace Injuries – Overall good news

- Since 1970, workplace fatalities have been reduced by more than 65 percent. Occupational injury and illness rates have declined by 67 percent. At the same time, U.S. employment has almost doubled.

- Worker deaths in America are down — from about 38 worker deaths a day in 1970 to 13 a day in 2011.

- Worker injuries and illnesses are down — from 10.9 incidents per 100 workers in 1972 to fewer than 4 per 100.
Injuries Today

- **#1 Sprains/Strains**
  - Backs
  - Shoulders

- **#2 Slips, Trips and Falls**
  - Backs
  - Shoulders
  - Knees/ankles
Snapshot of the workforce - 1995

- < 20 y.o.: 25%
- 20 - 30 y.o.: 15%
- 30 - 40 y.o.: 20%
- 40 - 50 y.o.: 30%
- 50 - 60 y.o.: 40%
- > 60 y.o.: 50%
Snapshot of your workforce - 2014

45 – 65 = nearly 50% of some employer populations

- < 20 y.o.: [Red bar]
- 20 - 30 y.o.: [Yellow bar]
- 30 - 40 y.o.: [Red bar]
- 40 - 50 y.o.: [Yellow bar]
- 50 - 60 y.o.: [Red bar]
- > 60 y.o.: [Yellow bar]
Who IS the aging worker?

- ~50 or above
- Between 1990-2005 number of working men between age 55-64 increased 43%, women 65%
- Called to be productive later in life, and in more strenuous positions
- Integral part of our current workforce-
  - workers 65 and older will increase 7 times as fast as that of the total labor force.

In 2008 – 28 million workers over 55 y.o.
In 2016 – there will be > 40 million
WHO is this growing group

“Screw retirement, I need to work”

Older workers are competing with people much younger and stronger, and there are less younger workers willing to do these jobs.

Why work –

– loss of retirement income, cost of health insurance, mortgage payment, medical bills, multi-generational household
Silver Tsunami — Metabolic Diseases

79 million people are pre-diabetic
- Less than 7% are aware of this

26 million have diabetes
- ONLY 5 million know this AND have it controlled

75% of healthcare costs stems from PREVENTABLE diseases

49% of Americans either have HTN, high LDL’s and/or are smokers

Heart Disease is the leading cause of death in the US
Silver Tsunami – WC costs

The 45-55 y.o. claimants average claim cost is 52 percent higher than the 25 – 35 y.o!

- Mean average age in manufacturing = 44.7
- AGE is the most critical factor in determining length of disability
  - Medical severity is 50 percent higher in those over 50
- Most common injuries are rotator cuff, knee injuries and low back – disc ruptures

-reference source: The Leader journal, VI 2, Issue 1, Winter 2015
Stats

Those with a chronic disease (HTN, DM) AND/OR are obese are
- 2 times more likely to have a WR injury
- 5 times more likely to NOT RTW
Snapshot of your workforce - 2015

45 – 65 = nearly 50% of some employer populations
Generational Differences

18 – 25 year olds
- Entitled
- Lazy
- “ME” attitude
- ?? Priorities
- Always looking to automate
- KNOW IT ALLS

Over 50 year olds
- Hard workers
- Loyal
- Appreciative
- “Family”
- Stubborn
- Prideful
- Resentful to change
Work related injuries within the two groups

18-25 year olds
- HIGH frequency
- Lower severity
- Short duration
- More common to have “incidents”

Over 50 year olds
- Lower frequency
- HIGHER Severity
- Higher DART rate
- >% RTW with restrictions
- Carryover to ADA cases
What IS Aging
Motor Control

- 10 – 25% decline in strength by age 65
  - POWER muscle groups (quads, deltoids etc) decline the fastest

- Muscle elasticity reduces
  - Losing 25% of flexibility by age 65
Posture as we age

12 lbs  
32 lbs  
42 lbs

Relative Weight of the Head
Cardiovascular

- 50% decline in heart filling capacity between age 20 – 80
- 10 percent decline in aerobic capacity every decade
  - up to 40 percent loss between 20 and 65
Vision Changes

Vision: changes accelerate after 40. Reduced night vision, near vision. Cataracts

Other Issues
- Inability to adapt to changing light levels
- Inability to transmit light
- Processing of visual information greatly reduces – moving objects are harder to see!
Hearing: changes accelerate after 55. High tones and speech hard to hear.
Nervous System

Nervous system (brain): changes accelerate after 60. Short term memory reduces
- Reflexes — significantly slow with age
Other Changes

- Sleep: reduced in total, and reduced deep sleep

- Metabolism reduces = weight gain

- Greater susceptibility to temperature extremes
Other Changes

- Kidneys: reduce in size and function. Tolerance to toxins reduces, risk of dehydration increases
- Bone: reduced density
- Learning capability reduces
Considerations

- Vision: increase lighting, mandate annual exams, use larger print
- Hearing: use flashing lights for warnings instead of sounds, communicate key messages away from the work floor, have workers repeat messages to ensure they hear everything
- Balance: do balance training, limit stairs/steps, mandate hand rail use
Balance Training
Considerations

- Eliminate or limit:
  - Mandatory overtime
  - Rotating shifts

- Increase job rotation

- Adhere to basic ergonomic recommendations
  - Safe work zones
  - Postural / body mechanics
  - Job specific stretching

- Offer general wellness services
Job Specific Stretching

Job Specific Stretches

Back: Place hands on hips and push forward until stretch is felt in spine and abdomen. Hold 15 to 30 seconds and repeat as needed.

Calves: Place foot on vertical support while pointing toes upwards. Lean forwards until stretch is felt in back of leg. Hold 15 to 30 seconds and repeat on opposite leg.

Hamstrings (back of thigh): Elevate foot. While keeping back and knee straight lean forward until stretch is felt in back of thigh. Hold 15 to 30 seconds and repeat on opposite leg.

Wrist (forearm): Grasp back of hand with opposite hand and pull towards yourself while keeping elbow straight. Hold 15 to 30 seconds and repeat on opposite side.

Neck: Grasp top of head and gently pull downwards until stretch is felt in back of neck. Hold 15 to 30 seconds and repeat as needed.

Neck: Grasp side of head and pull until stretch is felt on opposite side of neck. Hold 15 to 30 seconds and repeat on opposite side.

Curing
Body Awareness Program

What is Body Awareness?

Body awareness is described as the body’s recognition of where it is in reference to space. Essentially, it is another term for human balance. Body awareness consists of balance oriented movements that incorporate multiple muscle groups in order to keep the body in a stable position. Body awareness is an important aspect of our human balance and without it, one may be at a higher risk for injury.

What Muscles Are Involved?

Body awareness involves numerous muscles throughout the body functioning together to help maintain posture and balance. The body awareness program will focus on the muscle groups that help stabilize the spine, pelvis and both upper and lower extremities. Specifically, the “core muscles” located in the midsection of the body will be targeted and strengthened. These include areas like the hip flexors, abdominal muscles, lumbar/back muscles and thighs.
## Body Awareness Program

### Body Awareness Program Week 1

<table>
<thead>
<tr>
<th>Balance Exercises</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
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<tbody>
<tr>
<td></td>
<td>Sets</td>
<td>Reps</td>
<td>Sets</td>
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<tr>
<td>Single Leg (SL) Stand *</td>
<td>3</td>
<td>15 sec</td>
<td>3</td>
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<tr>
<td>Balance Ball (BB) Sitting #</td>
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<td>3</td>
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<tr>
<td>Split Squat *</td>
<td>3</td>
<td>10 each leg</td>
<td>3</td>
</tr>
<tr>
<td>Front Squat *</td>
<td>3</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Prone Opposite Arm and Leg Lift</td>
<td>3</td>
<td>10 each side</td>
<td>3</td>
</tr>
<tr>
<td>SL Stand Eyes Closed *</td>
<td>3</td>
<td>15 sec</td>
<td>3</td>
</tr>
</tbody>
</table>
Ergonomic Education

Proper Posture for Working Overhead

Week #1

- Poor posture and body mechanics can lead to undo stress to the whole body.
- From the neck into the shoulders down the spine all the way down to your knees and feet.

Proper posture is:

- Keep your shoulders back
- Use your stomach muscles to keep your back straight
- Slightly bend your knees to ease pressure on the hips and knees
- Use quality shoes that offer good support

POWER Zones

Week #2

- Overhead
  - Good: keep
  - Fair: keep
  - Poor: move

- Head to Chest
  - Good: keep
  - Fair: keep
  - Poor: move

- Shoulder to Waist
  - Good: keep
  - Fair: keep
  - Poor: move

- Waist to Knee
  - Good: keep
  - Fair: keep
  - Poor: move

- Below Knee
  - Good: keep
  - Fair: keep
  - Poor: move

Ready Position = POWER!
Ergonomic Education

Postures to look out for

- Bottom Up. Keep loads close and in front of you.
- Avoid Excessive Bending over.
- Limit Chicken Wing when possible. Elbows In.
- Minimize overhead reach when possible.
- Excessive looking up. Counter balance by looking down after looking up.

The Flexibility Program

- See your Athletic Trainer for job specific stretches/warm up activity.

A daily warmup routine will help to maintain range of movement of joints and tissue and prepare the body part for the task at hand.
Thank you!

Legacy Partner of the Chicago Cubs