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Enhancing Self-Management of Chronic Post-Concussive Symptoms: The Eisenhower Army Medical Center Functional Recovery Program

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Disclosures

- None
- The information presented represents our own opinions. We are not presenting on behalf of DDEAMC, The US Army or the DOD.



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OUTLINE

❖ JLR

❖ AV

❖ SRM

❖ RP



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Cognitive Enhancement and Maintenance after Mild Concussion

Aparna Vijayan, PhD, CCC-SLP



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OBJECTIVES

- ❖ To understand the impact of pain, mood and sleep issues on attention, memory and information processing
- ❖ To describe a range of task-specific strategies to improve attention and memory
- ❖ To provide information on different resources available for cognitive rehabilitation
- ❖ To increase awareness of the rehabilitation approaches provided by speech pathologists in cognitive rehabilitation and how these are of benefit to service members.



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Functional Recovery Program (FRP)

- ❖ 3-week immersion program, for combat veterans with TBI (and possibly PTS/depression)
 - 5 days a week, 7 modules/day
 - Modeled on evidence based interventions
- ❖ “Squad” model, small group of 6-9 Service Members
- ❖ Program includes
 1. Empowerment (Education)
 2. Mind-Body techniques
 3. Warrior’s Path
- ❖ Also includes training in coping skills, exercise, relaxation, cognitive education and retraining
- ❖ Spouse program during the second week for a “mini-family program”



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FUNCTIONAL RECOVERY PROGRAM

The Core of the FRP is to empower the soldier, encourage self-care, and actively involve the Soldier to “own” their recovery.

The impact of significant physical and psychological factors on recovery are recognized.

Strategies and resources to facilitate recovery in the face of physical and psychological constraints are offered to the Soldiers.



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FUNCTIONAL RECOVERY PROGRAM

❖ Multi-Disciplinary team

- Physicans (& Assistants) – Physiatrist, Psychiatrist, Neurologist, Physician Assistant.
- Behavioral Health Assets – Psychologist, Neuropsychologist, Social Worker (LCSW), Drug/Alcohol Counselor
- Traditional Rehabilitation Staff: Physical, Occupational, Speech, and Recreational Therapy
- CAM Providers – Chiropractor, Acupuncturist, Yoga
- Spiritual– Chaplain
- Nutrition – Dietician
- Exercise



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Goals of FRP

- ❖ Gaining perspective on injuries
- ❖ Empowerment with knowledge of resources
- ❖ Skills building, problem solving, goal-setting
- ❖ Management/alleviation of TBI, PTS, pain
- ❖ Restoration of sleep
- ❖ Reclamation of “Self”/soul work/spirituality
- ❖ Family re-integration
- ❖ Return to duty, identification of alternate MOS ‘ ,
exploration of vocational/educational/avocational
alternatives
- ❖ Successful military or community re-entry



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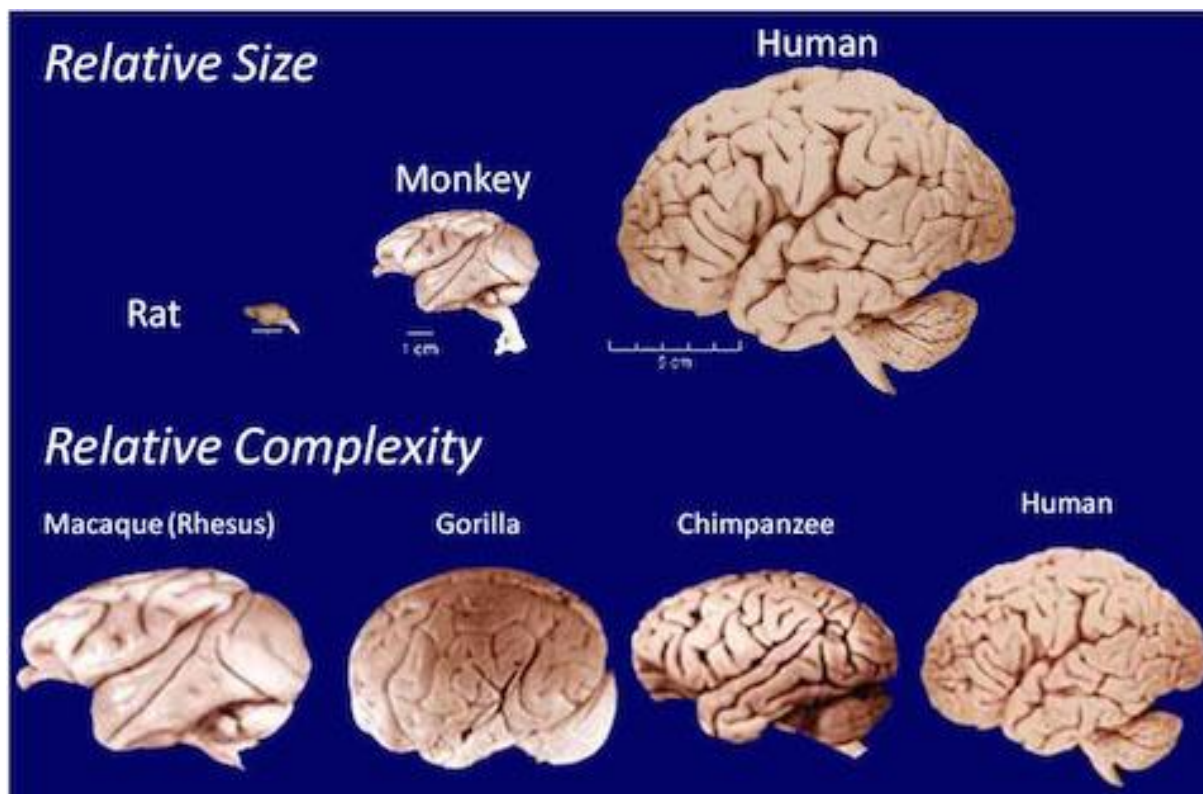
Benefits of FRP

- ❖ Awareness of not being alone in dealing with their problems
- ❖ Understanding the reasons for the change in behavior
- ❖ Learning of strategies to manage their pain, mood, and sleep issues
- ❖ Learning techniques to manage their stress, e.g., yoga
- ❖ Sharing of strategies between group members
- ❖ Family enrichment resulting from the spouse sub-program
- ❖ Understanding ways to improve mindfulness
- ❖ Understanding the learning is an ongoing process that never ends



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COGNITION & THE BRAIN



Roberts, T. (2016). Are We Really Just Wired Differently?
<http://www.baen.com/wireddifferently>



Principles of Brain Plasticity (Practice Matters)

Principle	Description
1. Use it or Lose it	Failure to use specific brain functions can lead functional decline.
2. Use it and Improve it	Training a specific brain function can enhance that function.
3. Repetition Matters	Sufficient repetition is needed to facilitate plasticity.
4. Intensity Matters	Sufficient training intensity is needed to facilitate plasticity.
5. Transference	Plasticity in response to one training experience can enhance/improve the acquisition of similar behaviors.



Principles of Brain Plasticity (Planning Matters)

Principle	Description
6. Time Matters	Different forms of plasticity occur at different times of training.
7. Salience Matters	The training experience must be sufficiently salient to facilitate plasticity.
8. Age Matters	Training-induced plasticity occurs more readily in younger brains.
9. Specificity	The nature of the training dictates the nature of the plasticity.
10. Interference	Plasticity in response to one experience can interfere with the acquisition of other behaviors.



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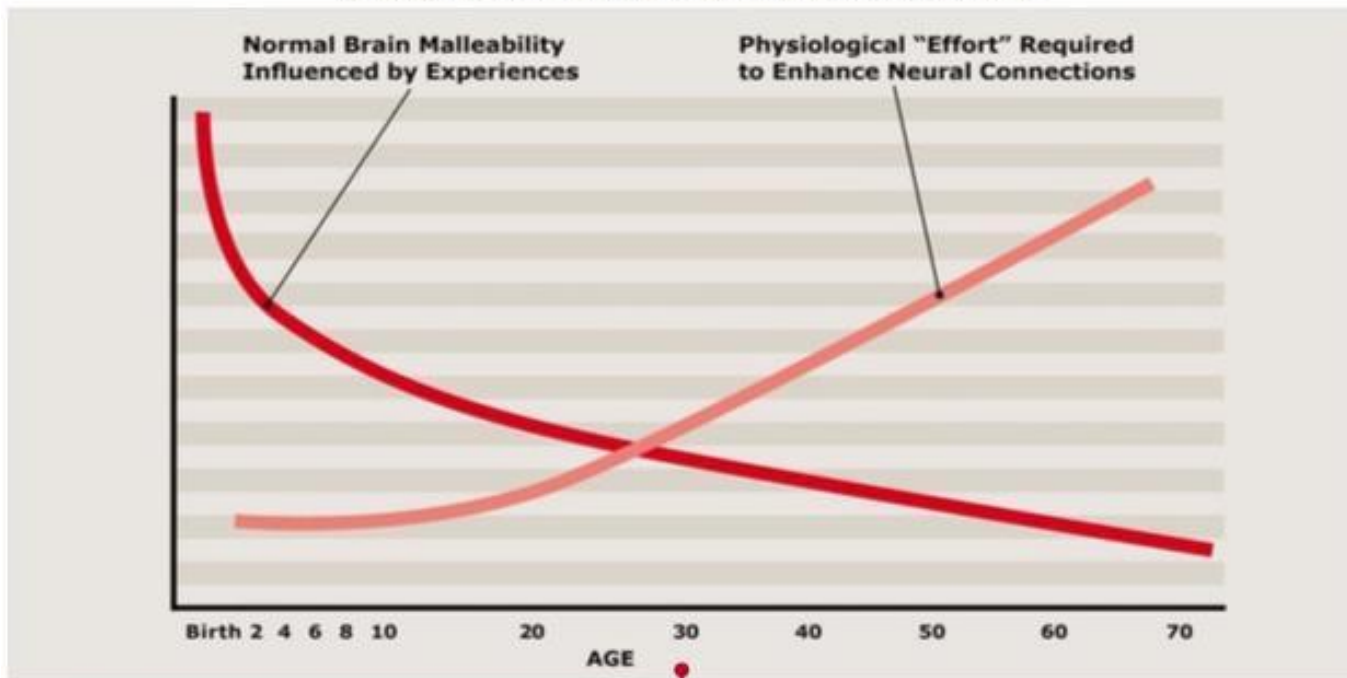
PLASTICITY

- ❖ Changes in the brain in response to internal or external factors
- ❖ Change occurs in both normal and pathological conditions
- ❖ Bad habits tend to be resistant to change
- ❖ Change requires effort (young < old)
- ❖ Change requires a lot of repetition
- ❖ USE IT or LOSE IT – If certain functions are not being exercised, those skills will decline
- ❖ USE IT and IMPROVE IT – Neurons that fire together, wire together!



AGE vs. EFFORT

The Ability to Change Brains and Behavior Decreases Over Time

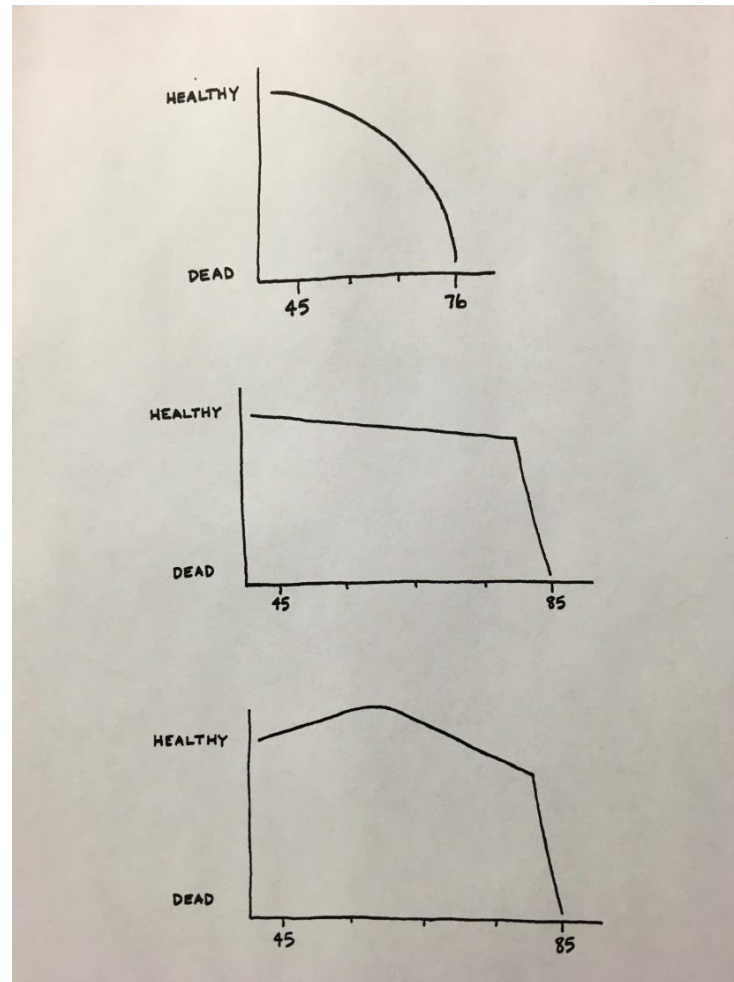


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As the maturing brain becomes more specialized to assume more complex functions, it is less capable of reorganizing and adapting. For example, by the first year, the parts of the brain that differentiate vocal sounds are becoming specialized to the language the baby has been exposed to and are already starting to lose the ability to recognize important sound distinctions found in other languages. As the brain prunes away the circuits that are not used, those that are used become stronger and increasingly difficult to alter over time. Declining plasticity means it's easier and more effective to influence a baby's developing brain architecture than it is to rewire parts of its circuitry in the adult years. In other words, we can "pay now" by ensuring positive conditions for healthy development, or "pay more later" in the form of costly remediation, health care, mental health services, and increased rates of incarceration. *Graph Source: P. Levitt (2009)*



- ❖ Being a little underweight is better
- ❖ Stay physically active
- ❖ Play brain brain or just learn something you do not know. Engage the brain



Crowley, C. & Lodge, H.S. (2007). Younger Next Year. Workman Publishing, New York.



Factors that affect memory

External/Controllable Factors

- ❖ Television
- ❖ Phones
- ❖ Radios
- ❖ People

Internal/Not Controllable Factors

- ❖ Age
- ❖ Neurological conditions (stroke, moderate-to-severe brain injury, progressive conditions)

Internal/Manageable Factors

- ❖ Pain
- ❖ Mood
- ❖ Sleep
- ❖ Fatigue
- ❖ Drugs

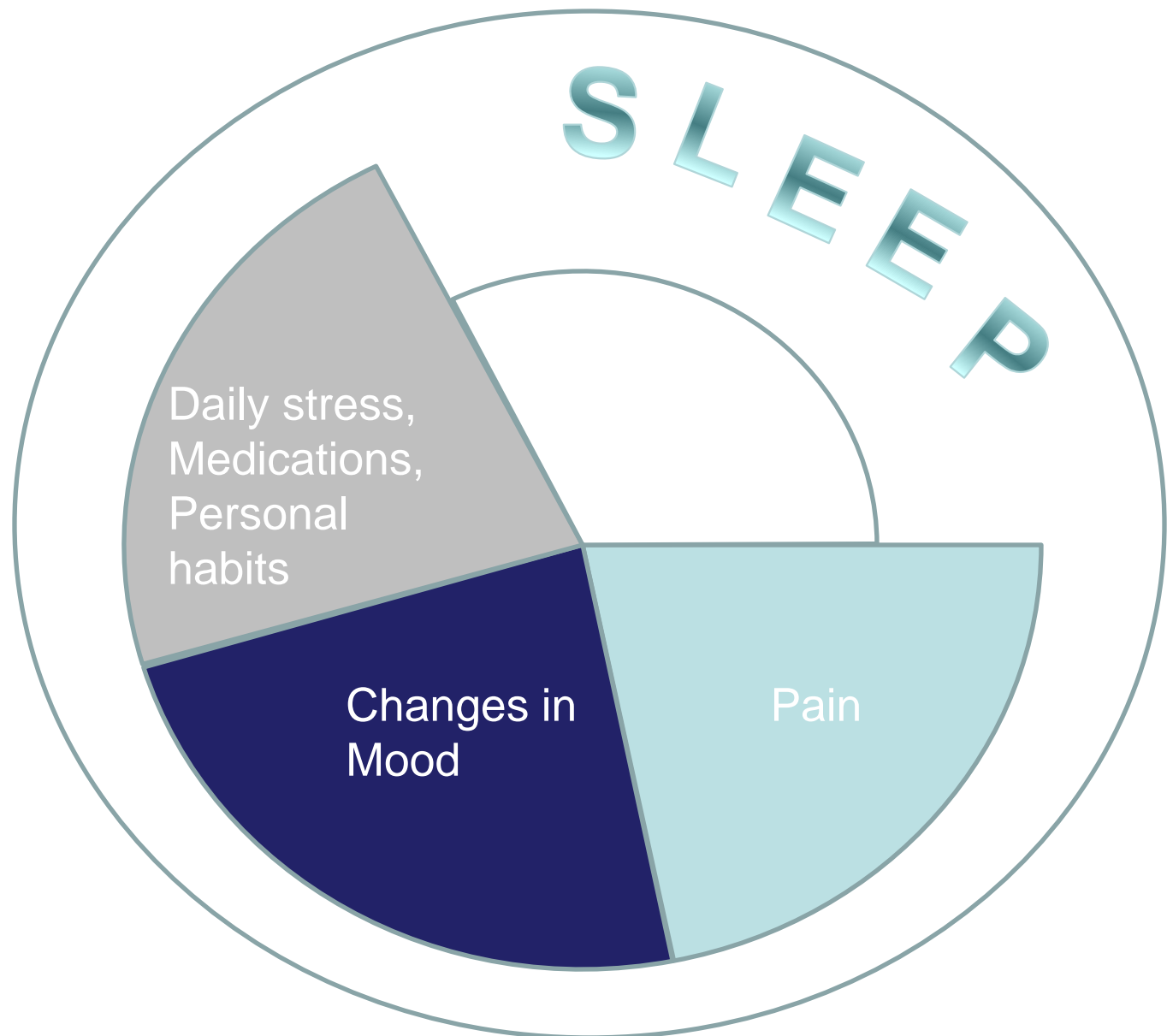
Habits

- ❖ Nutrition and Hydration
- ❖ Alcohol
- ❖ Smoking
- ❖ Caffeine intake
- ❖ Physical exercise
- ❖ Mental exercise



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ATTENTION





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MEMORY STRATEGIES

❖ Internal Memory Strategies

❖ External Memory Strategies

(Low-tech s. High-tech)

(Sohlberg M.M., Turkstra L.S. (2011) *Optimizing Cognitive Rehabilitation: Effective Instructional Methods*. New York, NY: The Guilford Press.

Cicerone, K.D., Langebahn, D.M., Braden, C. (2012). Evidence-based cognitive rehabilitation: Updated review of the literature from 2003 through 2008. *Archives of Physical Medicine and Rehabilitation*, 92, 519-531.)

❖ Attention Process Training

(Sohlberg M., Johnson L., Paule L., Raskin S., Mateer C. (2001). *Attention Process Training II: A program to address attentional deficits for persons with mild cognitive dysfunction*. Pallyup, WA: Lash & Associates Publishing/Training, Inc.)



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MEMORY STRATEGIES

WAAR-COP

Write it down

Acronym it

Associate it

Repeat/**R**outine it

Chunk it

Organize it

Picture it

Foundation Stones of Recall: WOR

Writing + **O**rganization + **R**epetition/**R**outine =
Effective Management of your Time and Possessions



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TIME MANAGEMENT

Essential Features of a Good Planner:

- ❖ Easily portable – can be carried with you every day.
- ❖ Easy for you to use – books vs. PDAs?
- ❖ Has ample space for daily to-do-lists and longer-term project lists.
- ❖ Can be easily updated.

MAKE THE WATCH YOUR CONSTANT COMPANION



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TIME MANAGEMENT

- ❖ **Commandments of Planner Use:**
- ❖ Thou may have one planner and one planner only.
- ❖ Thou must carry thy planner with thee at all times.
- ❖ Thou shalt enter every appointment and task into thy planner.
- ❖ Thou shalt consult they planner every morning, every mid-day, and every evening! In other words, you may not start your day without a plan!!

Solanto, M.V. (2011). Cognitive-Behavioral Therapy for Adult ADHD: Targeting Executive Dysfunction. New York, NY: The Guildford Press



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CONCENTRATION

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
5' read	10' read	10' read	15' read	15' read	20' read	20' read	25' read	25' read	25' read
2' break	5' break	5' break	5' break	5' break	5' break	5' break	5' break	5' break	5' break
5' read	10' read	10' read	15' read	15' read	20' read	20' read	25' read	25' read	25' read
2' break	<u>5' break</u>	5' break	<u>5' break</u>	5' break	<u>5' break</u>	5' break	<u>5' break</u>	5' break	5' break
5' read		10' read		15' read		20' read		25' read	25' read
<u>2' break</u>		<u>5' break</u>		<u>5' break</u>		<u>5' break</u>		<u>5' break</u>	5' break
									25' read
									<u>5' break</u>

The Pomodoro Technique <http://www.pomodorotechnique.com>



PQRST Method of Studying

P- Preview – Get the “big picture”

Q – Question – Ask Questions. Generate your foundation.

R – Read

Take down notes in a systematic manner.

Include the page number.

S- State

Read the notes out loud to make sure you understand the material.

Repeat, repeat, repeat.

First time....use the notes

Second time...refer to notes, as needed

Third time or more....refer to notes less and less

T – Test

Test yourself



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RESOURCES

Skill	Game
Word finding	Taboo, Catch Phrase
Naming/Spelling	Bananagrams, Scrabble, Scattergories, Link 26
Logical Reasoning/Problem Solving	Mastermind, Murder Mystery Mansion, Sudoku, Sequence, Clue, Logic Links, Perplexors
Abstract Reasoning/Memory	Q-bitz
Listening	Mad Gab, Taboo
Cooperative Planning	Forbidden Island, Tobago, Settlers of Catan



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APPLICATIONS

Applications for Smart Phones

Elevate

Peak

Computer Program

CogMed

Brain Train

Dakim Brain Fitness



- ❖ Total of 13 Service Members were seen across 3 cycles of the CTG
- ❖ Data was acquired using the Cognitive Linguistic Quick Test (CLQT), Test of Everyday Attention and Memory – 2nd Edition (TOMAL-2), and Test of Everyday Attention (TEA)
- ❖ The current data set looks specifically at memory outcomes on the CQLT and the TOMAL-2
- ❖ Only 10 SMs were re-evaluated after completing the CTG program
- ❖ 3 SMs left the Warrior Transition Unit (WTU) shortly after completing the CTG and could not be re-evaluated.



Pre-and post-CTG participation scores for Memory (TOMAL-2* & CLQT)

<u>SM</u>	<u>Pre-treatment skills</u>	<u>No. of treatment sessions</u>	<u>Post-treatment skills</u>
1.	Very deficient*	9	Average*
2.	Very deficient*	22	Average*
3.	Moderate	13	Normal
4.	Severe	16	Mild
5.	Severe	16	Normal
6.	Mild	12	Mild
7.	Severe	28	Mild
8.	WFL	16	WFL
9.	Mild	21	WFL
10.	Moderate	30	Moderate

Total number of participants – 11; **Not all SM's completed the post-test since some of the SM's left the Military Treatment Facility (MTF) (transfer to Community-Based WTU (CBWTU), or completion of Medical Evaluation Board (MEB))**



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LESSONS LEARNED

- ❖ Multi-disciplinary/trans-disciplinary approach to management of the SM is essential
- ❖ Every provider in the management team needs to be aware of ways in which to reinforce the recommendations of other providers in the team
- ❖ Cognitive rehabilitation treatment programs need to be holistic, functional, goal-oriented, and fun
- ❖ Cross-train the brain as you would the body
- ❖ Combine group treatment with individual treatment sessions
- ❖ Reinforce commitment to Army Values (Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage) to oneself for a lifetime!



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FRP Outcomes

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Outline

1. Introducing the cohort.
2. Introduce the assessment plan.
3. Describe the outcome metrics.
4. Show results of pre vs. post-test data.
5. Show results of 6-month follow-up data.



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FRP Cohort Demographics



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FRP Cohort Descriptives

- FY 2012 from JAN to SEPT; representing FRP cycles 24-30.
- N = 49 SMs, 98%male, 57%W, 27%AA, 14%HISP.
- Average Age [37.3 (9.3), 20-59].
- Average TIS [14.8 (8.2), 3-37.1]
- Rank: 14% were \leq E3, 78% \geq E4, and 8% Officers.
- Average # of Deployments [2.6 (1.3), 1-7].
- 67%AD, 16%NG, 12%RES.
- 25% Infantry, 14%EOD, 10% MPs, 12% Transportation, 39% other MOS.



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FRP Cohort Characteristics – Cont.

- Duty Station: 63% FT Jackson, 37% FT Gordon
 - > WTB: 53%
- Undergoing Counseling at time of matriculation into FRP: 69%
- Also followed by Psychiatry: 61%
- And participating in ASAP: 6%
- 41% had MEB underway.



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FRP Program Evaluation



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Program Evaluation Plan

- Pre-Test
 - Demographics questionnaire.
 - Patient Activation Measure.
 - Hope Herth Index.
 - Sheehan Disability Scale.
 - Eisenhower Recovery Assessment Tool.

- Post-Test / IEP add on
 - Patient Activation Measure.
 - Hope Herth Index.
 - Sheehan Disability Scale.
 - Eisenhower Recovery Assessment Tool.

- 6-Month Follow-Ups
 - Telephonic interview with SM and/or Military Collateral Informant.



Patient Activation Measure - Short Form (PAM; Hibbard et al., 2005)

- 13 item, copy-righted + fee for use, unidimensional, self-report questionnaire assessing a SMs knowledge, skills and confidence for self-management. E.g.,
 - > “I am confident that I can follow through on medical treatments I need to do at home”.
 - > “Taking an active role in my own health care is the most important factor in determining my health and ability to function”.
- Scores range from 13-52, and converted into “activation score” ranging from 1-4, where:
 - “1” Denotes that the SM believes that taking action is important,
 - “2” SM is confident and possess knowledge to take action,
 - “3” SM is actually taking action,
 - “4” SM continues to take action despite set backs!



Patient Activation Measure - Short Form (PAM; Hibbard et al., 2005)

- **Psychometrics:**

- Rash analyses suggest that the original PAM-22 is a unidimensional scale and Cronbach α was .91. Construct validity with SF8, lower rates of office or ER visits, exercise regularly, follow low fat diet, not smoke, seeking out providers credentials (Hibbard et al., 2004).
- PAM-SF accounts for 92% of variance of 22 item original long form; Similar RASH statistics (Hibbard et al., 2005).
- Shown to predict a range of health behaviors, e.g., health screenings, immunizations, good diet, exercise, monitoring and adherence, diabetic related hospitalizations; as summarized by Hibbard et al., 2009); also diabetic related parameters (Remmers et al., 2009), self-efficacy in MS (Stepleman et al., 2010) and favorable HIV outcomes (Marshall et al., 2013).



Hope Herth Index (HHI; Herth, 1992)

- 12 item, public domain, self-report questionnaire measuring hopefulness. E.g.,
 - > “I can see possibilities in the midst of difficulties”.
 - > “I have a sense of direction”.
- Scores range from 12-48, where a higher score conveys higher hopefulness. 3 sub-scales can be calculated, reflecting “Temporality & future”, “Positive readiness & expectancy”, and “Interconnectedness”.
- Psychometrics: Cronbach α 's range from .75-.94 across different populations; 2 to 3-week test retest reliability ranges from .89 to .91, with strong divergent validity with Beck Hopelessness Scale (i.e., $r = -.69$) (Herth, 1992; Herth, 1993).



Sheehan Disability Scale (SDS; Sheehan et al., 1996)

- 3 item, public domain, self-report questionnaire commonly used in psychiatry studies, assessing disability in work/school activities, family relationships, and social functioning. Uses a 0-10 Likert scale.

Also, SM is asked to estimate the number of days lost and unproductive owing to their symptoms.

Please mark **ONE** circle for each scale.

WORK* / SCHOOL

The symptoms have disrupted your work / school work:

Not at all Mildly Moderately Markedly Extremely

(0) ← (1) — (2) — (3) — (4) — (5) — (6) — (7) — (8) — (9) → (10)

I have not worked / studied at all during the past week for reasons unrelated to the disorder.

* Work includes paid, unpaid volunteer work or training



Sheehan Disability Scale (SDS; Sheehan et al., 1996)

- Scores range from 0-10 for each of the 3 items, where a lower score reflects less disruption or impact of symptom on self-reported functioning in that area. Scores ≤ 3 reflect mild self-rated impact, “0” is no impact. Total score is summed across the 3 rating scales.
- Psychometrics: Cronbach $\alpha = .89$ in primary care and bipolar patients (Leon et al., 1997; Arbuckle et al., 2009); Factor analysis suggest a unitary factor (Arbuckle et al., 2009); 8 to 12 week test-retest reliabilities = **.73** (Arbuckle et al., 2009).



Eisenhower Recovery Assessment Tool (E-RAT)

- Developed by NRC-TBI Clinic staff in an effort to help quantify FRP specific knowledge acquisition including mind-body skills as well as instillation of hope.
- 45 items, rated on a 1-4 scale, where “1” refers to False, not true, “2” is Slightly true, “3” Mainly true, and “4” is Very true. E.g.,
 - > “When memory or attention problems don’t improve 3 months after experiencing a concussion, it’s probably because of psychological causes such as ongoing difficulties coping with pain, sleep problems, mood changes, or stress”.
 - > “I know what to do to calm down my racing thoughts when trying to fall asleep”.
 - > “I believe there are things I can do to recover”.



Eisenhower Recovery Assessment Tool (E-RAT)

- Total score ranges from 45-180, where higher score reflects improved understanding and knowledge about common problems facing military SMs with a history of concussion, strategies and techniques that can be utilized to self-manage their challenges, and degree of hope.
 - 3 Rationally derived factors also can be calculated, reflecting: Education (25 items), Mind-body skills (17 items), Hope (3 items)

Psychometrics (based on pre-test for this cohort):
Chronbach's α : Total Score (.85), Education (.83),
Mind-Body (.67), Hope (.84).



Metric	Pre-Test Avg(SD)	Post-Test Avg(SD)	P value
Patient Activation Measure (Total score can range from 13-52; Higher score is enhanced self-management)			
Total Score	38.4(4.7)	43.4(5.0)	<.001
Level	2.5(1.0)	3.3(.95)	<.001
Hope Herth Index (Total score can range from 12-48; Higher score is reflects increased hope)			
Total Score	32.3(5.6)	36.7(5.5)	<.001
Sheehan Disability Scale (Total Score can range from 0-30; Lower score is less disabled)			
Total Score	20.6(7.0)	17.4(8.0)	0.004
Eisenhower Recovery Assessment Tool (Total score can range from 45-180; Higher score denotes enhanced knowledge and hope)			
Total Score	118.4(14.3)	144.8(14.5)	<.001
Education Score	73.6(9.7)	84.5(7.8)	<.001
Mind-Body Skills Score	36.7(5.7)	50.8(6.9)	<.001
Hope Score	8.1(2.3)	9.6(2.1)	<.001



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6 Month Follow-Up Outcome Data



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6-Month Follow-Ups

Procedurally:

- Telephonic interviews with SM and identified collateral informant such as Squad or Platoon Leader.
- 3 attempts to contact SM + 3 attempts to contact collateral.
- 2/49 SMs at pretest did NOT grant permission to contact.
- Handouts of script/data recording document can be provided on request.

Note:

- Of 49 FRP SMs, 31/49 (63%) provided 6-month follow-up outcome information.
- For 20/49 (41%) FRP SMs, Military Collateral was willing to provide feedback.
- 14/49 cases had *both* SM and Military Collateral information.



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SM's Self-Reported 6-Month F/U Outcome Data

Per SM subjective self-report, now 6 months after commencement from FRP:

- Working on average: 28.9hrs/wk (27.2), range 0-108.
- 87% remain in Military.
- 48% returned to unit. 38% did not.
- 83% did not require change in MOS.
- 6/49 had been medically discharged. 1/6 gainfully employed as a civilian.
- 87% had remained single or married, 4% separated, 4% divorced.



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Carry Over of FRP Strategies & Techniques

FRP Strategy or technique of:	Remember how?	Believe it can help you ?	Has helped you before?	Currently using it?
Belly breathing	90%	84%	71%	61%
Meditation	97%	84%	64%	61%
Exercise	97%	94%	87%	84%
Yoga	97%	81%	48%	23%
Puzzles, brain games to keep sharp	97%	87%	71%	58%
Sleep hygiene	100%	84%	68%	77%
Stretching	94%	84%	74%	74%
Pursuing recreation	90%	84%	68%	55%
Improved eating habits	94%	87%	71%	65%
Anger management	87%	77%	65%	77%



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Subjective Self-Improvement

Area of Life	Under Control/ No Longer A Problem	Gotten Better	About the Same	Probably Worse	Was Never A Problem/ Not Applicable
Memory		10%	74%	16%	
Headaches		23%	61%	16%	
Problems falling or staying asleep		18%	34%	10%	
Irritability/mood		39%	39%	13%	7%
Participation in exercise		42%	42%	13%	3%
Sexual functioning		16%	52%	26%	7%
Non-headache pain (back, neck, etc.)		16%	45%	36%	3%
Use of cigarettes	7%	7%	16%	3%	68%
Use of alcohol	7%	16%	16%		61%
Stress in general		32%	42%	26%	
Hopefulness about self and future		36%	58%	7%	
Relationships improved with family/others		36%	48%	13%	3%
Re-engaged in hobbies		36%	29%	23%	13%
Work ideas or possibilities	3%	23%	39%	23%	13%
Involvement in community		10%	52%	23%	26%



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Patient Satisfaction with FRP

- Rate the FRP program compared to other interventions that you may have received?
 - > 71% **BEST!**, 26% **BETTER!**, 3% same, 0% worse, 0% worst.
- 100% would recommend the program to other SMs.
- 94% of FRP commencers would be open to attending a refresher course.



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6-Month Military Collateral Information

Since FRP Commencement, per Squad/Platoon Leader:

- SM's Hrs worked/week: 28.4(26.3), range 0-100.
- 90% of SM's were able to return to unit and 100% required no change in MOS. 5% were medically retired.
- 65% of SM's "attitude" had improved since returning back to unit. 35% no change from baseline.
- 35% of SM's demonstrated an "improved" work ethic. 65% no change from baseline.
- 30% of SM's able to better able to keep up with duties as assigned. 70% no change from baseline.
- 33% of SM's were working "more" than they had been before FRP, 50% about the same, and 17% less.
- 43% of SM's were missing less days at work. 33% no change. 24% unsure if missing less days.
- 10% of SM's had a reduction in their PT profile, 33% no change, and 57% were unsure if PT profile had changed.



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Traumatic Brain Injury

Ronald Paolini DO, DFACN



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OBJECTIVES

- To understand the role of a psychiatrist as part of an interdisciplinary team treating military patients with TBI and comorbidities in a 3 week intensive outpatient program
- Discuss interventions to establish group communication and trust within an intensive outpatient program
- To understand the concepts of empowerment and Warriors Path / Journey as it relates to this program
- To share with the audience the fundamental concepts we have learned in working with our military population



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**Treatment Team is the strength
of this program**

- **The psychiatrist needs to be an integral part of the team.**



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Behavioral Health Components

- Neuropsychologist
- Psychologist
- Psychometricians

- Masters Level Social Worker (Primary Therapy)

- Psychiatrist: General Psychiatry, Addiction Psychiatry, Addiction Medicine and Brain Injury Medicine, psychosomatic medicine (consultation liaison)



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Psychiatrist role

- Utilize the input of testing as indicated
- Work in harmony with the Masters Social work staff in providing therapy for the behavioral health component of patients treated in the TBI clinic
- Provide medication consultation as indicated however also provide combined therapy and medication in patients where necessary and best served as sole provider.
- Apply knowledge of the interplay of medical complications, comorbidity in these complex cases that may involve, substance use disorders, chronic pain, etc.



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Psychiatrist role

- Where appropriate serve in liaison function as some patients may be receiving therapy services / psychiatric services in other departments of the facility. For example embedded behavioral health in primary care, outpatient behavioral health or children and family services.
- Review documentation and update the TBI treatment team regarding behavioral health treatment progress
- Goal of facilitating comprehensive, holistic treatment of the patient such that all therapies work in concert.



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Role in the Functional Recovery Program

- Be a member of the entire team that will work with the patient.
- Meet with the patient on day one briefly on individual basis
- Establish an individual contact
- Review any individual issues that may have a bearing on participation from a behavioral health viewpoint.
- Review the basic outline of the program and goals otherwise known as a treatment plan.
- If unavailable on day one delegate to another provider.



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The challenges

- The patients attending the program may or may not know each other at all.
- There will be patients of all ranks participating – enlisted and officers in the same group.
- The common disorder is a traumatic brain injury however the comorbidities can be numerous.
- Multiple service branches represented in each group – Army, Air Force, Marines, Navy.
- All skill sets – infantry, intelligence, logistics etc.
- Group is male and female though greater proportion of males.



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Overwhelming?

- Yes and no!
- We are all people and beneath every uniform there is a person.
- “Flip the situation around and change chairs..” Roy Pasker DO, my mentor. You be the patient!
- Question from the patients view and the primary initial need
- Can I TRUST this team to help me?
- If basic trust and faith in the treatment cannot be established then the efficacy of the treatment is in peril



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To establish trust

- You must calm the amygdala first! Address the hyperarousal and fear response that may or may not be evident outwardly in group members.
- Then you can access the hippocampus to appeal to learning and group process.



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My sessions within the 3 week program

- Initial meeting with group: Empowerment I - 2 hours
- Empowerment II – 1.5 hours.
- Psychiatry I & II – 2 hour block.
- Empowerment III – 1.5 hours
- Empowerment IV – 1 hour (Joint meeting with spouses)
- Empowerment V – 1.5 hours
- Total 9 hours – How much can you do? What do you want to open up knowing you have limited time? Have realistic expectations!
- Goal is to engage the patient and change their trajectory.



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Empowerment 1 (Program day 2)

- Initial goal is to establish trust
- Need for self disclosure to include you as group facilitator.
- Can you expect someone to trust you if they don't know who you are?
- Share hometown, age, interests, marital status, children, education, years experience etc. Patients are curious about us and these patients have memory, mood issues, headaches, post traumatic stress, chronic pain etc.
- I go first as I am leading the group. Leaders lead!
- I also ask anyone attending as a guest to include students, new employees, staff if sitting in to do the same.



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Empowerment 1 cont'd

- Basic trust and comfort!
- Go around the table with each doing an introduction.
- I focus on years in service, skill set, number of deployments and where, marital status, divorces if offered, children, family of origin if info offered etc.
- You start to see similarities of where they deployed and when
- You start to feel a comfort in the room.
- Restlessness starts to dissipate
- People that were isolated start to bond and become social again, fear decreases a “unit” starts to form.



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Importance of forming a unit

- Soldiers train as a unit
- Work as a unit
- Deploy as a unit
- The “battle buddy” is as close to family as it gets and sometimes is even closer than family.
- In illness the soldier becomes isolated which is part of the pathology and withdraws.
- Social withdrawal – depression, anxiety disorders, ptsd



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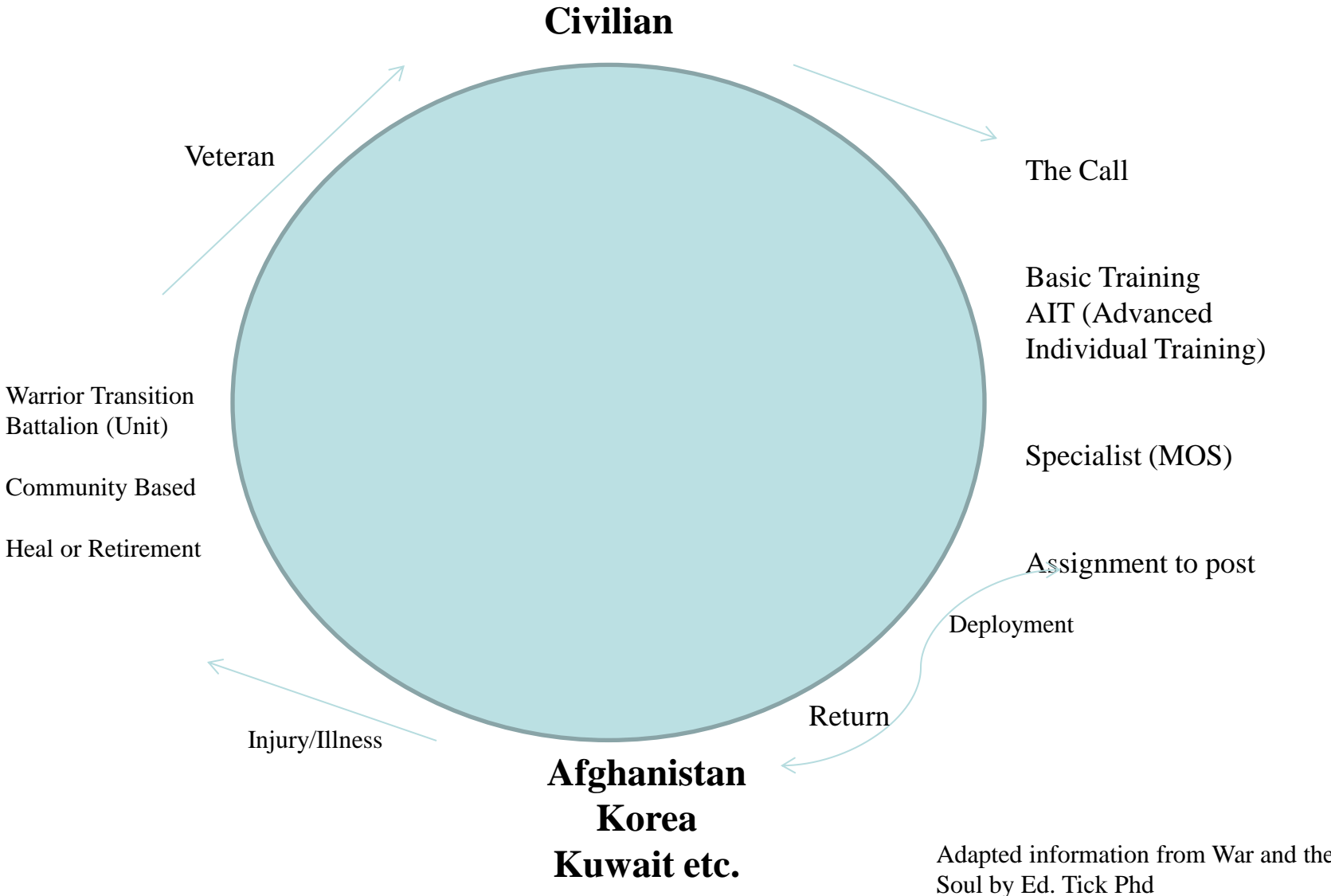
Empowerment 1 cont'd

- Reinforce trust, confidentiality in the group.
- Admit we all have revealed personal information to each other that we may not want repeated.
- Establish a circle of trust.
- I also indicate that notes for the group will be rather generic and not entail specifics.
- The reality is that we are all people with common bonds
- Introduce to the group the concept of the Warriors Path.



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Warriors Journey





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Empowerment #1 cont'd

- Homework: The Call
- I ask the group for our next session to think about their personal call to service and to be ready to share what was involved in their decision as well as why they have continued to serve beyond their initial contract.



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Army Values

- Loyalty
- Duty
- Respect
- Selfless service
- Honor
- Integrity
- Personal Courage



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Empowerment II (Program Day 6)

- Goal for this session is for group members to better understand each other, including group facilitators.
- I again take lead and discuss why I am working at a military facility with the same invitation to any guests attending to share. I also focus on what I find rewarding.
- All group members give their personal call to service and reasons for staying in the service.
- The discussion automatically goes to discussion of values.
- Evidence very clearly that commitment is to each other and the relationships that develop while serving.



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Group dynamic

- Goal is to facilitate self efficacy
- Some analogy to AA model of mutual / self help.
- The meeting after the meeting where networking occurs with the group members.
- Out of town attendees are staying in hotels on the base
- Facilitation of eating supper meal together, bonding.



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Psychiatry I & II (Program day 7)

- 2 hour time block with a break
- More of an open discussion.
- I have shared my background and training with the group.
- They know I was a pharmacist and generally have many questions about medications. I also indicate my experience in healthcare as either pharmacist / physician since 1979.
- Share experiences within the healthcare system with shortcomings and lack of better word nightmares.
- In short I let them air their laundry so to speak.



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Psych I&II cont'd

- I ask them about what they are pursuing – health or a healthy state.
- Discuss some definitions of health with the goal of understanding that it differs given the complexity of the organism and also the situation
- Combat unit health state vs Family healthy state – very different.
- Reality they all bring up is deployment is much easier than being home! The combat mission is much more simple.



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Cont'd

- Why?
- Marriage, kids, kids activities, homework, karate, bills, home repairs, etc. etc.
- More expectations at home.
- These points are important for a later session with the spouses.
- Generally most soldiers are eager to return to deployments as they view it as their “new norm.”
- Many of our soldiers have deployed >4 times, many for 12 months or more.



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Cont'd

- Discuss various treatments frequently used and limitations.
- Medications and side effects
- Surgery
- The doctor visit itself in primary care settings.
- The fear and stigmata of being seen in the behavioral health department and consequences on security clearances, career advancement et.
- Common theme difficulties are never addressed and let go until bigger.
- Mission first and carry on mentality. Human nature!



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Cont'd

- Reinforce: the need to work with providers effectively and if unable to - seek new providers!
- Communicate with their healthcare providers.
- Frustration: no eye contact with provider who is doing computer entry instead of talking directly with the patient. They feel like they have a check list visit.
- If they are not confident in the provider's ability or that they have made an accurate assessment then they need to seek another opinion.
- All too often they don't follow through with recommendations i.e. take prescribed medications.



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Empowerment III, Program day 8, 1.5 hours

- Next step in the Warriors Journey is to discuss deployment or sometimes referred to as the descent.
- I haven't assigned any homework at the previous meeting. Reason is that as a group these are memories they don't like or want to discuss.
- The goal for the group is to use an alternative way to discuss issues that are difficult to really get into by overcoming resistance.
- The modality for this group – art as a therapeutic tool.
- Remember: we are trying to reinforce self efficacy.



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Cont'd

- I ask each group member to reflect on their deployments.
- Sketch / draw in whatever capacity they can the image that comes to mind when they think of their deployments.
- I instruct that we will discuss each and the pictures are theirs to keep. They are asked to talk about how they made it through the experience.
- All levels of artistic skill are fine
- Pencils, markers, crayons whatever they prefer.
- We take 15 minute to draw and the balance of the session is spent reviewing as many as we can.



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Cont'd

- Discussions vary
- Not all bad or traumatic memories
- Report positive and negative experiences
- Many common experiences as service members realize many times they were there at the same time in different areas and experienced very similar feelings.
- Validation and processing of memories with sharing.
- Important from the clinician stance I get a true feeling of what they experienced with some experience of who they were going in and how they are coming out.
- Realization that they are not alone in what they feel.



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Empowerment IV, Program day 9, 1 hour

- Conjoint session with spouses that are attending.
- Goal is to enlist the spouse in better understanding of where the service member is in recovery by an introduction to the Warriors Journey and discussion.
- For the soldier to better appreciate the spouses concerns and struggles.
- For both service member and spouse to understand the spousal role in advocacy for the service member.
- My meeting with the group is at the end of a rather packed day so I attempt to keep the group active and engaged.



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Cont'd.

- Basics introduction of spouse.
- Many times this hasn't happened in the whole days activities and talk about years married.
- Encourage spouse to talk about service member. Empower spouse to discuss openly share pertinent information.
- I then review the Warriors' Journey with the group.
- Discuss the challenges of the cycle and the toll on family.
- Special challenges of returning from deployment on leave only to go back. What is the soldier like during that time?
- How is the service member now?



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Cont'd.

- The discussion goes where it needs to.
- The group shares challenges but also solutions that they may be employing.
- Networking develops.
- I reinforce the importance of advocacy.
- I point out the input of spouses and that as the service member may be deployed they are minding the house and all the activities that are so complicated.
- I also provide information regarding various retreats that may be available for family support.
- The message is that you are not alone.



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Empowerment V, Program day 11, 1.5 hours

- This session is an invitation to work with us and be our boots on the ground in helping other service members.
- Who better to facilitate help but a peer?
- Several years ago I found on the internet a series about lack of coordinated care in the DOD / VA leading to disastrous results.
- Article is from 2011 commenting on a Marine's injuries in Iraq in 2006.
- This predated some of the current programs that have been developed but outlines ongoing issues in an all too common story.



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Cont'd.

- Young Marine from small town Alabama
- Meets high school friend who is stewardess when flying into Camp Lejeune on then US Airways.
- Quickly develop relationship and marry.
- Six weeks after marriage he deploys to Iraq on second deployment.
- Shortly into tour vehicle drives over land mine in Ramadi
- He suffers a TBI, mangled leg and takes shrapnel injury.
- Medevac to Lundstuhl and later to Walter Reed.



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Cont'd.

- Heroic treatments at Walter Reed to save his limb fail and he ends up with amputation after multiple surgeries, infections and months of procedures.
- Use of chronic opioids for chronic pain leads to a use disorder with aberrant behaviors and impulsivity which combines with his concussive history.
- Marriage ends in separation after much turmoil due to abuse.
- Service member ends up in a free program in Texas which is outpatient day treatment seems to be making some progress.



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Cont'd.

- However relapses on fentanyl that he was prescribed and smoked it resulting in OD / death.
- Dies in his hotel room alone.
- Wife finds out when his mother posts it on Facebook.
- Family ends up in dispute trying to get funds for a headstone for the grave from the military.
- Reality this is a hero, life saved by military medicine, only to die from consequences of opioid use disorder.
- Call to action for all of us.
- We discuss where interventions could've helped.
- I close asking them to join our team get peers help needed.



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Take home messages

- This is not easy work!
- We have described a program that is resource and time intensive.
- There are guidelines and some evidence base to utilize however much really continues to be unknown.
- We have evidenced based treatments for PTSD that include Cognitive behavioral, cognitive process therapies, EMDR, exposure based therapies along with appropriate medications.
- How should those treatments be modified when complications of concussion are present?



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Take home cont'd.

- Do we know if a concussed brain metabolizes psychotropic meds differently?
- We now follow protocols for return to play, work, fight after concussion. However what about the concussions that occurred before these protocols or those that fail to report the concussion?
- If you work with these patients in therapy you will feel and will bond with them. It is rewarding but the traumatic experiences they share will weigh on you as a therapist.
- A team is key in our opinion in the recovery process.



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Take home points continued

- Consider the effects of concussion on the clinical picture you are seeing and explore the history.
- These patients are in your offices, this is considered the signature injury of our current conflicts in Iraq and Afghanistan.
- Headaches, memory impairments, disturbances of mood and sleep are hallmarks along with balance and other potential neurologic symptoms.
- As a sole provider try to integrate with other providers to meet the patients needs and utilize good communication.



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Take home points continued.

- We find benefits in the use of integrative therapies combined with other modalities in our patients
- These to include yoga, meditation, biofeedback training, recreational therapy, manipulative therapy and mind body skills.
- As a psychiatrist working with these patients be involved and a team member, bring all your knowledge to the table and be holistic in your approach.



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REFERENCES



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Questions ?

