

JOURNAL OF THE ACADEMY OF MEDICAL PSYCHOLOGY

ARCHIVES of MEDICAL PSYCHOLOGY

VOLUME 5, ISSUE 1 March 2014



March 2014 • Volume 5, Issue 1

Managing Editor

Ward M Lawson, PhD, ABPP, ABMP

Associate Editors

Susan Barngrover, PhD, ABMP
John L Caccavale, PhD, ABMP
James K Childerston, PhD, ABMP
Jeffrey Cole, PhD, ABMP
Greg Coram, PsyD, APN-BC, ABMP
S. Gary McClure, PhD, ABMP
Jerry A Morris, PsyD, MBA, MS Pharm, ABPP, ABMP, ABBHP
John L Reeves II, PhD, MS, ABPP
Gilbert O Sanders, EdD, ABMP

Editorial Consultants

William Bernstein, PhD, ABMP Alan D Entin, PhD, ABPP James M Meredith, PhD, ABPP, ABMP Mark Muse, EdD, ABPP, ABMP Jack G Wiggins, PhD, PsyD, Editor Emeritus



Editorial Policy

The Archives of Medical Psychology publishes original articles online regarding the application of medical psychology as it applies to the psychological, biological and sociological aspects of healthcare. Medical Psychology is defined by the Academy of Medical Psychology and appears on its website at http://www.amphome.org. Authors are invited to review this definition of Medical Psychology prior to submitting their manuscripts for publication.

Articles regarding diagnosis, treatment and practice of medical psychology for prevention and amelioration of disabling conditions or human suffering are welcomed. Documentation of current practices in the diagnosis, treatment and prevention of health disorders is essential for the development of techniques and methods of medical psychology and may be given preference. Issues dealing with the economics of access to health care, the political aspects of the scope of practice of medical psychology and comparison of techniques of diagnosis and treatment in healthcare are within the purview of this Journal. Articles dealing with the education, training and advancement of medical psychology in the public interest are included in the broad-spectrum of the definition of medical psychology. How advancements in other scientific fields will affect medical psychology will be considered for publication. The Journal also publishes timely brief reports of research germane to medical psychology and health care.

The Archives of Medical Psychology has chosen the electronic online medium for prompt distribution of articles of interest in medical psychology. Electronic transmission offers advantages of speed and economy for the distribution of important scientific works pertinent to medical psychology. The purpose of the Journal is to deliver accurate state-of-the-art information as quickly as they can be prepared. Therefore, articles will be published when they are deemed ready for publication and will not be collected and held to arbitrary publication dates. Subscribers to the Journal will be notified when new articles are published online. The page numbers of the articles will be in consecutive order in the Volume of the year in which they are published.

Information for Authors

Submit manuscripts electronically to http://www.amphome.org. Authors should submit their manuscripts of their original work in the style used in this issue of the Archives. Articles cited should be numbered in the order in which they appear in the text and then listed by number in the Reference section, but MLA style with alphabetized references by author is also acceptable (see: http://bcs.bedfordstmartins.com/resdoc5e/res5e

ch08 s1-0013.html) and articles in MLA style will be followed by a foot note (Note: Author submitted article in the alternate MLA style!" Submissions of manuscripts should be double-spaced preceded by an Abstract of not more than 250 words. Up to five keywords or phrases should be included in the Abstract to assist in the review process. All manuscripts are copyedited for bias-free language. Graphic files are welcome when supplied as Tiff, EPS, or PowerPoint.

The publication policy of the Archives is to refuse manuscripts submitted concurrently for consideration in other journals. Authors are obligated to consult with editors of the Archives concerning prior publication of any data on which the article depends. The Archives adheres to the American Psychological Association (APA) Ethical Principles that specify that "after research results are published, psychologists do not withhold the data on which their conclusions are based from other competent professionals who seek to verify the substantive claims through reanalysis and who intend to use such data only for that purpose, pro-vided that the confidentiality of the participants can be protected unless less legal rights concerning proprietary data preclude their release."

Ethical Standards: Authors are required to state in writing that they have complied with APA ethical standards in the treatment of their sample, human or animal, or to describe the details of treatment. Authors are required to obtain and provide the Editor on the final acceptance all law all necessary permissions to reproduce in print and select electronic form in a copyrighted work, including, for example, test material or portions thereof and photographs of people.

Manuscript review is by a blind reviewing process with the author's names and locations concealed from peer reviewers. Authors will be notified when their article is submitted for peer review. Results of the peer review process will be e-mailed to the first author of an article.

Reference Style examples

- 1. Muse M & McGrath R. Training comparison among three professions prescribing psycho-active medications: Psychiatric nurse practitioners, physicians, and pharmacologically-trained psychologists. J Cl Psycho. 2010, 66, 1-8.
- 2. Norcross J & Goldfried M. Handbook of Psychotherapy Integration: Second Edition. 2003. New York: Oxford Univ Press.
- 3. Army Regulation 40-68, Medical Services, Clinical Quality Management (Revised). Issue Date: 22 May 2009, pgs 33 & 34. Department of the Army, Washington, DC: Author. Web link: http://www.army.mil/usapa/epubs/pdf/r40 68.pdf
- 4. Disaster Response Network 1991 http://www.apa.org/programs/drn/index.aspx

The Archives of Medical Psychology can be contacted at 815 S. Ash, Nevada, MO 64772. http://www.AMPhome.org, Ward Lawson, Managing Editor, 417-667-8352



VOLUME 5, ISSUE 1 March 2014

Archives of Medical Psychology

Table of Contents Volume 5, Issue 1

Masthead	
Editorial Policy	jij
Table of Contents	V
rable of contents	····· v
Military Mild Traumatic Injury Awareness for Civilian Practitioners	1
Exploring the Benefits and Drawbacks of Granting Prescriptive Authority to Psychologists Daniel Kaplin and Michael Dacunto	12
Report from the Trenches: Survey of New Mexico Prescribing Psychologists' Outpatient Practice Characteristics and Impact on Mental Health Care Disparities in Calendar 2013 Christina E. Vento	30
Family Interventions in Lifestyle Medicine Ward M. Lawson	34
Writing Psychological Prescriptions for Behavioral Healthcare	42

Military Mild Traumatic Injury Awareness for Civilian Practitioners

M. Chris Wolf, PhD, ABPP

TBI Service—Martin Army Community Hospital Fort Benning, GA

Abstract

Since the beginning of operations in 2001, the military services have provided approximately 2.5 million service members to the wars. Almost half have been deployed more than once to Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF) and Operation New Dawn (OND). Many times that number of Americans have been affected when one includes spouses, parents, children, and friends. The signature wounds of these wars have been Traumatic Brain Injury and Posttraumatic Stress Disorder (PTSD). Comorbid mild Traumatic Brain Injury (mTBI) and PTSD represent a large proportion of those affected. Tens of thousands of service members are now returning to their home communities. The purpose of this article is to provide basic information and resources for community-based providers of behavioral health services regarding these disorders as they have affected military service members.

Introduction

The U.S. combat mission in Iraq (Operation Iraqi Freedom, OIF) ended in August 2010. A transitional force of U.S. troops remained in Iraq under Operation New Dawn (OND), which ended on December 15, 2011. Operation Enduring Freedom (OEF) is ongoing in Afghanistan but is scheduled to conclude at this time in late 2014.

U.S. military casualties in the active OEF, as well as operations that have ended Operation New Dawn (OND, Irag) and Operation Iragi Freedom (OIF, Irag) have been substantial. Traumatic Brain Injuries (TBI) and Posttraumatic Stress Disorder (PTSD) have been referred to as the signature wounds of these wars. Recently some military providers have also included chronic pain as another signature of the above wars as it is prevalent and pervasive among returning soldiers

Currently available data reveals that 253,330 service members have sustained a TBI from 2000 through the fourth guarter of 2012. Between November 2011 and October 2012, there were more than 15,000 IED attacks against U.S. service members in Afghanistan, and 58 percent of all coalition casualties during that span were caused by the hidden bombs. 2

Of the total TBIs, 194,561 or 77% have been classified as a mild Traumatic Brain Injury (mTBI). Data from the Department of Defense (DOD) would suggest that the U.S. Army has borne the brunt of the injuries since 147,536 of the 253,330 have been Army service members.

From 2000 through December 3, 2012, 103,792 deployed service members have been diagnosed with PTSD.3 Among 327,388 OEF/OIF veterans using Veterans Administration Health services in 2009, 6.7% were diagnosed with TBI. Among those

Correspondence Address: M. Chris Wolf, PhD, ABPP, 1804 Free Terrace, Frederick, MD 21702

with TBI exposure, 89% were diagnosed with a psychiatric diagnosis. PTSD was the most frequent at 73%. Seventy percent had a diagnosis of head, back, or neck pain. The rate of comorbid PTSD and pain among those with and without TBI was 54% and 11%, respectively. 4

Suicide is a greater risk factor among service members and veterans with these disorders. Service members with a history of TBI have been found to be at increased risk for suicidal ideation, attempts and completed suicide.⁵ Interestingly, longer duration of loss of consciousness has been associated with a deceased likelihood for any suicidal behavior. According to the Veterans Administration (VA), veterans composed 20% of the nation's suicides with approximately 18 veterans killing themselves daily; five of whom were enrolled under VA care. Three of five veterans enrolled who completed a suicide were patients with a known mental health condition.⁶

Other common co-morbidities with mTBI include headache, depression, and chronic pain. Recent research involving redeployed combat veterans revealed that sleep disturbances and problems with sleep disordered breathing are common. Those with a diagnosis potentially related to combat stressors (e.g., PTSD, major depression, anxiety disorder, etc) had a higher incidence of sleep disturbances. Understanding the interface between traumatic stress and mTBI injuries can be complex.

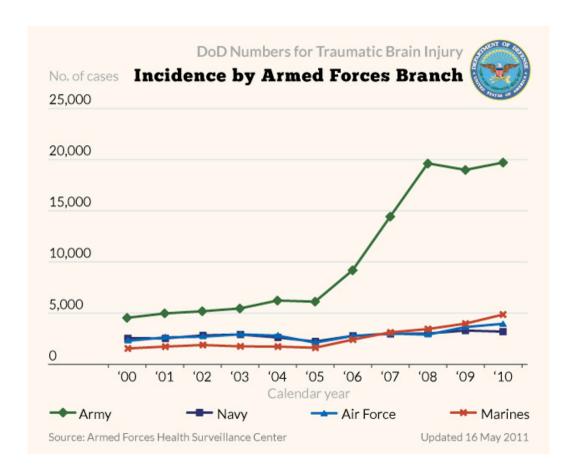
Marital and parent-child relationships have also been identified as a casualty of over 11 years of war including multiple deployments not seen in other wars. Soldiers or veterans committing domestic violence may be suffering from undiagnosed PTSD. Regardless of the etiology, the data suggest that domestic violence and divorce have increased to levels not seen historically. According to the Department of the Army data, the total referral numbers for service member offenders of domestic violence increased by 50% (4,827 to 7,228), while child abuse referrals increased by 62% (3,172 to 5,149) from October 2008 through September 2011. Divorce for the first time in history is higher among active duty service members than in the civilian population.⁹

There are significant shortages of clinical and medical psychologists within the military and veteran's healthcare systems often complicated by antiquated and discriminatory hiring practices. ¹⁰ A recent search of openings for psychologists within the federal service on https://www.usajobs.gov revealed 138 vacancies even during a hiring freeze due to the budget sequestration.

More services members are leaving the military due to downsizing as a consequence of conclusion of recent wars. Consequently, it is reasonable to conclude that with the current downsizing of the military and shortages of mental health providers in federal service, more of the services will be shifted to community providers. Thus, it is incumbent upon community behavioral health providers to become familiar with the various disorders, including mTBI, that they are likely to confront. While most providers have a background in some or all of these disorders, they are less likely to understand how they are impacting the population of active duty service members and veterans.

mTBI (Concussion)

Concussion among military personnel has increased significantly since the beginning of the recent wars. As the chart below indicates, U.S. Army personnel have sustained the highest proportion of concussion injuries.



Causes of mTBI

A mTBI or concussion may be caused by a blast injury, blow to the head during sports or combative training, vehicle accidents or falls. The most common cause of TBI among soldiers is blast injury. ¹¹ Blast injuries have been classified as primary, secondary, tertiary or quaternary. ^{12, 13}

Primary blast injuries are caused by blast overpressure waves or shock waves to a service member who is close to exploding munitions. Ears, lungs and hollow organs such as the gastrointestinal tract are most affected. External injuries may not be present but injuries to blood vessels and brain axons are hypothesized. Military funded research is ongoing in order to define possible microvascular changes in the brain from primary blast injury.

Secondary injuries are caused by fragments and objects such as glass, nails, stones or rocks propelled by the explosion. Tertiary injuries result when the person is displaced by the explosion and may be thrown against a solid object such as an armored vehicle or wall. Finally, quaternary injuries are other miscellaneous injuries such as flash burns, crush injuries, traumatic amputations and respiratory injuries.

Blows to head often during sports or combative training exercises are another common form of military concussion. However, one of the most onerous injuries is a blast followed by a blunt head trauma such as might occur when a vehicle rolls over following the explosion. Vehicle accidents may occur while deployed to a combat zone but often

occur when on or off duty while in the United States. Finally, falls can also occur while in the combat zone such as traversing the mountains in Afghanistan or falling off a vehicle or guard tower. Certain military duties (e.g., paratrooper) increase the risk of sustaining a TBI from a fall. Concussions are often seen in soldiers who have had a "hard landing" during airborne training or while in combat airborne exercises.¹⁴

TBI Classification

While there are various systems of classification of TBI, the Department of Defense (DOD) classifies TBI in the following manner: (2)

Table 1. Severity of Brain Injury Stratification

Mild	Moderate	Severe
Normal structural imaging		Normal or abnormal structural imaging
LOC = 0-30 min	LOC > 30 min and < 24 hours	LOC > 24 hours
AOC = a moment up to 24 hrs		AOC > 24 hours Severity based on other criteria
PTA = 0-1 day	PTA >1 and >7 days	PTA > 7 days
GCS = 13-15	GCS = 9-12	GCS = 3-8

AOC – Alteration of consciousness/mental state

LOC – Loss of consciousness

PTA – Post-traumatic amnesia

GCS=Glasgow Coma Scale

Note: For purposes of injury stratification, the Glasgow Coma Scale is measured at or after 24 hours

This stratification does not apply to penetrating brain injuries where the dura mater is breached.

Concussion/Mild TBI is characterized by the following: A confused or disoriented state which lasts less than 24 hours; loss of consciousness for up to 30 minutes; memory loss lasting less than 24 hours; and structural brain imaging (MRI or CT scan) yielding normal results.

Moderate TBI is characterized by the following: A confused or disoriented state which lasts more than 24 hours; loss of consciousness for more than 30 minutes, but less than 24 hours; memory loss lasting greater than 24 hours but less than seven days; and structural brain imaging yielding normal or abnormal results.

Severe TBI is characterized by the following: A confused or disoriented state which lasts more than 24 hours; loss of consciousness for more than 24 hours; memory loss for more than seven days; and structural brain imaging yielding normal or abnormal results. **Penetrating TBI**, or open head injury, is characterized by the following: A head injury in which the dura mater, the outer layer of the meninges, is penetrated. Penetrating injuries

can be caused by high-velocity projectiles or objects of lower velocity such as knives, or bone fragments from a skull fracture that are driven into the brain.

Common Symptoms

Common symptoms seen in military personnel who have suffered mTBI include headache, dizziness, balance problems, tinnitus, blurred vision, sleep disturbance, anxiety, depression, irritability, anger, nightmares, fatigue, deficits in information processing speed, short-term memory problems, concentration problems and deficits in attention. Every concussion or mTBI is unique. While acute concussive symptoms usually resolve within two to 30 days, service members seeking treatment postdeployment are likely to suffer from lingering symptoms and co-morbid disorders. Some newer research using diffusion tensor imaging (DTI) has shown clear evidence of microvascular white matter changes in mTBI. (15) (We are currently engaged in two major studies of Postconcussion Syndrome and PTSD using sophisticated imaging techniques and assessment of other biomarkers).

The impact of concussions on service members have included occupational and interpersonal relationship difficulties, domestic and other violence, and substance use (alcohol, drugs, and supplements). There is a difference between sports concussion and a concussion that has occurred in a military environment. The most obvious difference between military combat-related concussion or mTBI and sports-related concussion is the mechanism of injury. Combat-related concussions frequently involve blasts from various forms of explosive devices. Virtually all service members who sustain a concussion following a blast a also suffer from blunt trauma. This can happen when a vehicle that is hit by an improvised explosive device. In addition to the blast wave, service members frequently hit their head against the interior of the vehicle. Further, hormones and proteins that are produced due to increased sympathetic nervous system activity and the austere environments of combat, such as excessive heat in desert warfare affect those concussed in combat differently.

Accommodations for mTBI

Behavioral health providers need to be aware that the person with a mTBI may require modifications in the therapeutic approach. Irritability, anxiety, depression, and a change in personality are common concomitant symptoms to TBI. Other symptoms include restlessness, aggression, mood swings, anger, decreased libido, impulsiveness, loss of social judgment, and lack of ability to tolerate stress or alcohol. These symptoms may result directly from the TBI or postconcussion syndrome. However, complicating the clinical picture is that these symptoms may also be secondary to depression, anxiety or PTSD.

Community providers should also be aware that pre-existing behavioral health conditions are common among service members who have been deployed. In a sample of 1,078 U.S. military personnel who received mental health services while deployed to Iraq 29% had a previous psychiatric diagnosis (50% given 9 months prior to deployment). The most common disorders were ADHD (57%), anxiety disorders (44%), mood disorders (38%) and adjustment disorders (32%).

Psychotherapy with cognitively impaired service members may require different communication, external aids and modifications in the therapeutic environment.¹⁷ Behavioral health providers need to be aware that even though the patient may appear to be intact, subtle neurocognitive changes in attention, concentration and memory may

result in less than optimal outcomes if these issues are not addressed. Examples of communication would be to use simple and short sentences and summarize key points throughout the appointment. Environment changes might include more frequent and or shorter sessions or holding sessions during the patient's best time of day. Helpful external aids might include diagrams, session agendas or use of written notes.

PTSD

PTSD and mTBI prevalence rates for service members returning from OEF and OIF have been reported as high as 13.5% and 19.5%. PTSD was a stronger predictor of postconcussive symptoms (PCS) than mTBI in a sample of 953 U.S. National Guard soldiers deployed to Iraq. Concussion/mild TBI (mTBI) was reported by 9.2% of soldiers in Iraq one month before returning home. One year later, 22% of this sample reported sustaining mTBI during that deployment. PCS were commonly reported by individuals with or without histories of mTBI or PTSD. 19

After accounting for PTSD symptoms, mTBI without PTSD at the first assessment was not associated with postconcussive symptoms, depression, problematic drinking, somatic complaints, social adjustment or quality of life at the second assessment. Report of PTSD symptoms at the first assessment more strongly predicted postconcussive symptoms and negative psychosocial outcomes than did mTBI history.

Medications approved for treatment of PTSD include the selective serotonin reuptake inhibitors (SSRIs), serotonin norepinephrine reuptake inhibitors (SNRIs), serotonin 2A antagonist reuptake inhibitor (SARIs) Nefazodone (formerly known as Serzone), and noradrenergic and specific serotonin antidepressants (NaSSAs) useful also for sleep. Also determined useful are the dopamine and norepinephrine reuptake inhibitors (DNRSs) such as Bupropion IR (Wellbutrin IR), etc. Prazosin (Minipress) is being used for management of nightmares. At this time there is insufficient evidence to support the use of Prazosin, anticonvulsants, or atypical or typical antipsychotics as monotherapy for PTSD. Atypical antipsychotics are not recommended as an adjunctive therapy for PTSD.

For a more thorough review of the advantages, disadvantages, safety margin and efficacy of these medications can be found at the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury website http://www.dcoe.health.mil/.

In a webinar presentation in 2012, Dr. Freidman recommended the following for comorbid PTSD and cognitive impairment: start low, go slow, avoid anticholinergics, avoid benzodiazepines, and consider stimulants and cognitive behavior therapy for mTBI. In fact, psychotherapy has been identified as the most enduring form of therapy for PTSD as patients tend to relapse following discontinuance of medications. There is some emerging evidence that, given a choice, patients would rather have CBT than medication. The Department of Defense (DOD) and the VA recommended Cognitive Processing Psychotherapy (CPT), Prolonged Exposure Therapy (PE) and Eye Movement Desensitization and Reprocessing (EMDR) psychotherapies for PTSD. Problem solving psychotherapy and stress inoculation training are also considered potentially efficacious.

PTSD vs. mTBI

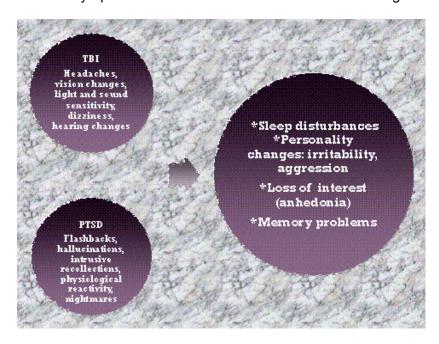
Since there are overlapping symptoms, differential diagnosis of the impact of PTSD and mTBI can be challenging. It is also believed that a service member will purposely

misattribute symptoms of PTSD to mTBI. Behavioral health problems are still stigmatized in the military, more so than brain injury. Some soldiers have not sought or have delayed seeking care for behavioral health problems due to concerns that seeking care will impede career advancement or their ability to obtain a security clearance. (1) Thus, soldiers may knowingly assign PTSD-related symptoms and emotional distress to the more acceptable diagnosis of mTBI.

TABLE 1
Overlapping Symptoms of mTBI and PTSD (23)

Symptom	mTBI	PTSD
Trauma Exposure	X	X
Re-experiencing symptoms		
Intrusive memories	X	X
Nightmares		X
Flashbacks		X
Psychological/physiological distress at remin	nders	X
Avoidance symptoms		
Avoid reminders (thoughts or activities)		X
Social detachments	X	X
Inability or partial trauma recall	X	X
Diminished interest in activities	X	X
Sense of foreshortened future		X
Arousal symptoms		
Insomnia	X	X
Irritability or anger outbursts	X	X
Concentration problems	X	X
Hypervigilance		X
Exaggerated startle response		X

Some other common symptoms and differences can be seen in the diagram below:



Military Culture

Ethical practice requires that clinicians be familiar with the culture of the people they serve. The military services have their own cultural values and norms. Communication is vital in diagnosis and treatment of behavioral and health problems.

It is advisable for clinicians to become familiar with military ranks and insignias. Among other places, that information may be accessed at http://www.defenselink.mil/specials/insignias/.

Understanding the experiences of combat veteran's cultural norms is important to developing rapport and improving treatment outcomes. Be aware of the differences between Reserves and National Guard troops. For example, within the military culture are norms of high standards of discipline, professional ethos of loyalty and self-sacrifice, ceremony, emphasis on group cohesion and esprit de corps that connects service members to each other.

Common Military Phrases and Acronyms

Understanding the military culture is important to developing a good rapport and therapeutic alliance. Professional ethics also warrant that the clinician appreciate and understand the culture of the patients they serve. The following are some common phrases and terms used by service members with which it would be prudent that you become familiar.

http://www.realwarriors.net/healthprofessionals/militaryculture/articles.php

Blown Up – Exposure to an IED, VBIED, RPG or rocket attack sufficient to cause injury.

CHU: Containerized housing Unit (pronounced "choo") – aluminum boxes slightly larger (22' x 8') than a commercial shipping container, with linoleum floors and cots or beds inside.

CP – check Point, Usually numbered.

CSH – Combat Surgical Hospital. Pronounced "cash".

DFAC - Dining FACility where soldiers eat.

Drive On – The ethos of the soldier. Just keep on going. Usual used in the phrase "Suck it up and drive on."

ETS – Estimated Term of Service or when the SM's contract ends.

FOB – Forward Operating Base

GWOT - Global War On Terrorism

IED – Improvised Explosive Device

Inside the Wire – Inside the base or could refer to inside an enemy combatant detention facility.

NCO – Non-commissioned Officer. A fancy way of saying sergeant.

NCOIC/OIC Non-commissioned Officer In Charge/Officer In Charge

Outside the Wire – Outside the security perimeter surrounding the FOB. Soldiers go outside the wire to go on a mission.

PPE – Personal protection Equipment

REFRAD - Release from Active Duty

RGP - Rocket Propelled Grenade

SM - Service member

VBIED – Vehicle born IED, i.e. Car or Motorcycle Bomb.

Conclusion

Community practitioners will have the opportunity to provide services to the many veterans returning from the recent wars. It is important that civilian practitioners have the knowledge, cultural sensitivity, and tools necessary to treat this population. Many resources for behavioral health providers are available through the federal government websites mentioned in the article. There are also numerous opportunities for continuing education, some of which is free to community providers. A considerable amount of research is ongoing sponsored by the DOD and VA. It is incumbent to all interested individuals to keep abreast of developments in veteran's behavioral health care as new research is made available. Those interested in developing a more comprehensive understanding of acute evaluations, postdeployment assessments, rehabilitation, and disability determinations of concussion and comorbid deficits may refer to other sources.²⁴

References

- Department of Defense Task Force on Mental Health. An achievable vision: Report of the Department of Defense Task Force on Mental Health. 2007. Falls Church, VA: Defense Health Board.
- 2. DoD Worldwide Numbers for Traumatic Brain Injury. 2012 Retrieved 2/24/2013 http://www.health.mil/Research/TBI_Numbers.aspx
- 3. Fischer, H. U.S. military casualty statistics: Operation new dawn, operation Iraqi freedom, and operation enduring freedom. Congressional Research Service. 2013. Retrieved 2/24/2013 http://www.fas.org/sgp/crs/natsec/RS22452.pdf
- 4. Taylor BC, Hagel EM, Carlson KF, Cifu DX, Cutting A, Bidelspach DE, Sayer NA. Prevalence and costs of co-occurring traumatic brain injury with and without psychiatric disturbance and pain among Afghanistan and Iraq war veteran V.A. users. Medical Care. 2012 Apr: 50(4):342-46.
- 5. Bryan, J.B., Clemans, T.A., Hernandez, A.M., Rudd, M.D. Loss of consciousness, depression, posttraumatic stress disorder, and suicide risk among deployed military personnel with mild traumatic brain injury. Journal of Head Trauma Rehabilitation. 2013 28(1):13-20.
- 6. United States Department of Veterans Affairs. Suicide Prevention Fact Sheet. VA Suicide Prevention Program. 2010. Washington D.C: April.

7. Capaldi, V. F., Guerrero, M.L. and Killgore. W. Sleep disruptions among returning combat veterans from Iraq and Afghanistan. Military Medicine 2011 176, no. 8. (May): 879 88.

- 8. Vastering, J.J. Bryant, A.B., Keane, T.M. PTSD and mild traumatic brain injury. 2012. New York: The Guilford Press.
- 9. Miovic, M. Military Mental Health: An Army of Children. Psychiatric Times, 2011, October 28.
- 10. Wiggins, J. Clinical positions, internships and board certification. The Clinical Practitioner, 2013, 8(2), 5-7.
- 11. Defense and Veterans Brain Injury Center (DVBIC). [unpublished]. Washington (DC): U.S. Department of Defense; 2005.
- 12. Cernak I, Savic VJ, Ignjatovic D, Jevtic M (1999). Blast injury from explosive munitions. J Trauma, 47(1), 96-103; discussion 103-104.
- 13. Garner, J., & Brett, S.J., Mechanisms of injury by explosive devices. Anesthesiology Clinics 2007 25: 147-160.
- 14. Ivins BJ, Schwab K, Warden D, Harvey S, Hoilien M, Powell J. Traumatic brain injury in U.S. army paratroopers: prevalence and character. Journal of Trauma Injury, Infection and Critical Care 2003; 55(4): 617-21.
- 15. Bigler, E.D. & Maxwell, M.L. Understanding mildtraumatic brain injury: Neuropsychology and neuroimaging. In PTSD and mild traumatic brain injury. Vasterling, J.J., Bryan, R.A. and Keane, T.M. (Eds.), New York; The Guilford Press, 2012.
- 16. Larson, G.E., Hammer, P.S., Conway, T.L., Schmied, E.A., Galarneau, & M.R., Konoske, P. Predeployment and in-theater diagnoses of American military personnel serving in Iraq. Psychiatric Services, 2011. 62 (1), 15-21.
- 17. Kortte, K.B., Briggs, F. & Wegener, S.T. Psychotherapy with cognitively impaired adults. In GP Koocher, JC Norcorss, & SS Hill, III (Eds.) The psychologists Desk Reference 2nd Edition (342-346, oxford University Press (2005).
- 18. Tanielian, T., & Jaycox, L.H. Invisible wounds of war: Psychological and cognitive injuries, their consequences, and series to assist recovery. 2008. Santa Monica, CA: RND Corporation.
- 19. Polusny MA, Kehle SM, Nelson NW, Erbes CR, Arbisi PA, Thuras P. Longitudinal effects of mild traumatic brain injury and posttraumatic stress disorder comorbidity onpostdeployment outcomes in national guard soldiers deployed to Iraq. Arch Gen Psychiatry. 2011; 68(1):79–89.
- 20. Stein, M. B. & Steckler, T. Behavioral neurobiology of anxiety and its treatment. 2010. New York: Springer
- 21. Friedman, M.J. Understanding psychopharmacology polypharmacy in service member and veteran populations. Defense Centers of Excellence Webinar. 2012. October 24.
- 22. The Management of Post-traumatic Stress Working Group. VA/DoD clinical practice guideline for the management of post-traumatic stress 2010. http://www.healthquality.va.gov/Post Traumatic Stress Disorder PTSD.asp
- 23. Jones, K.D., Young, Y.Y., and Leppma, M. Mild traumatic brain injury and posttraumatic stress disorder in returning Iraq and Afghanistan war veterans: Implications for assessment and diagnosis. Journal of Counseling & Development, Sumer 2010 (88) 372-376.
- 24. Kennedy, C.H. & Moore, J.L. Military neuropsychology. New York: Springer, 2010.

Note: The opinions or assertions contained herein are the private views of the author and are not to be construed as official or reflecting the views of the Army, Department of Defense or United States.

Exploring the Benefits and Drawbacks of Granting Prescriptive Authority to Psychologists

Daniel Kaplin, MA and Michael Dacunto, BA

College of Staten Island
City University of New York

Abstract

The topic of prescriptive authority for psychologists (RxP) remains a highly contested issue. This review article examines the benefits and liabilities of RxP from a program evaluation perspective. The effectiveness of RxP training sequence, consumer safety, arguments for and against the need for RxP training, research surveying the viewpoints of psychologists, training directors, and trainees, and other benefits and liabilities are presented and evaluated. The article concludes with ways to close the gap between proponents and opponents of RxP to help this initiative regain traction throughout the United States.

Keywords: prescriptive authority, training, consumer safety, underserved populations, liabilities, benefits

Exploring the Benefits and Drawbacks of Prescription Privileges for Psychologists

In 1974, Nick Cummings created a task force to explore whether psychologists should pursue prescriptive authority (RxP), but the APA council chose not to support this initiative (Puente, 2011). This taskforce led to several states exploring whether their members were interested in prescriptive authority. Bascue and Zlotowsi (1981) did a Pennsylvania-based study and found only 36 % of their respondents were interested in pursuing prescriptive authority at that time. However, there has been a significant increase of support for RxP in the past 30 years (Fagan, Ax, Liss, Resnick, & Moody, 2007; Sammons, Gorny, Zinner, & Allen, 2000).

In 1984, Senator Inouye encourages psychologists propose a bill to allow psychologists prescriptive rights in the state of Hawaii (DeLeon, Fox, & Graham, 1991; Fox et al., 2009; Murray, 2003; Van Winkle, 2010). In 1985, Resolution 159 was the first of nearly 90 pieces of legislation across 25 states exploring the feasibility of prescriptive authority for psychologists (DeLeon & Sammons, 2010; Fox et al., 2009). Lieutenant Commander Michael Tilus (2008) reported Floyd Jennings, a psychologist, started prescribing in the mid-1980s as part of the Santa Fe Indian Health Services.

The Department of Defense created a Congressionally-mandated Psychopharmacology Demonstration Project (PDP) in 1989 to train military psychologists to prescribe. This legislation was signed by President Bush in 1990 and the first training class started in 1991 (Fox et al., 2009; Lavoie & Barone, 2006; Murray, 2003; Van Winkle, 2010). The

Correspondence Address: Daniel Kaplin, MA, Department of Psychology, College of Staten Island, 2800 Victory Blvd, Building 4S-108, Staten Island, New York, 10314. Email: daniel.kaplin@csi.cuny.edu/

PDP program graduated 10 military psychologists, with 3 from the Army, 4 from the Navy, and 3 from the Air Force between 1994 and 1997 (Alpert et al., 2000; Lavoie & Barone, 2006; Oliveira-Berry, DeLeon, & Jennings, 2004; Sammons, 2010; Sammons & Brown, 1997).

The final summary from American College of Neuropsychopharmacology (2000) stated that the program was effective at training and filling critical needs, produced outstanding individuals, had harmonious relationships with the psychiatric community, had few formulary restrictions, and led to greater training opportunities. Concerns were expressed about the resultant knowledge base of these psychologists relative to psychiatry residents. However, as a whole, the evaluation panel stated, there has been no adverse effects associated with the PDP and that the project as a whole was a "job well done."

Guam became the first territory to pass legislation to approve prescriptive authority for psychologists (Fox et al., 2009). This was followed by New Mexico in 2002and Louisiana in 2004(Ax, Fagan, & Resnick, 2009; Lavoie & Barone, 2006; Moore, 2010; Munsey, 2008; Sammons, 2010; Shahidullah & Carlson, 2011). The successful implementation of RxP has led to a marked increase in support by the psychological community (Ax, Forbes, & Thompson, 1997; Fagan et al., 2004; Fagan et al., 2007; Sammons et al., 2000)

Nevertheless, the RxP movement also has a strong history of opposition within and outside the psychology community (Sammons, 2010). For example, the American Medical Association, American Psychiatric Association, and the American College of Neuropsychopharmacology strongly opposed the original Department of Defense project (Sammons, 2010; Van Winkle, 2010). There are also several psychologists who have opposed the development of the RxP movement (Bascoe & Zlotowski, 1981; Bush, 2002; Sammons, 2010).

Historically, several groups have opposed prescriptive authority such as American Association of Applied and Preventive Psychology (AAAPP), Committee Against Medicalizing Psychology (CAMP), and Psychologists Opposed to Prescription Privileges for Psychologists (POPPP) (Bush, 2001; Hayes, Walser, & Follette, 1995; Heiby, 2010; Kapalka, 2008; Politt, 2003). A review of the frequent arguments presented in favor and against RxP will be discussed below.

There seems to be a strong association between knowledge of and support for prescriptive authority (Pimentel, Stout, Hoover & Kamen, 1997). The goal of this paper is to take the existing literature and debate on RxP and reorganize it through a program evaluation analysis. After discussing training issues and consumer safety, the paper examines the following program evaluation themes: (a) Is there a need for RxP (b) Does the RxP program adequately address this need? (c) Do current and future psychologists support RxP and (d) What are the benefits and drawbacks of RxP?

Training Issues

The starting point in developing a position in favor or in opposition of RxP would be to determine whether psychologists can be appropriately trained to prescribe medication. The American Psychological Association (2009) requires a psychologist at a minimum to have obtained a doctoral degree in psychology, licensure, and practice as a therapist to be eligible for training as a prescribing psychologist. The Department of Defense's

Psychopharmacology Project was significant in the development of a training sequence to train psychologists to prescribe psychotropic medication (American Psychological Association, 2009; Campbell & Fox, 2010; Sammons, 2010).

The current sequence of training incorporates the first iteration of the PDP, but has been revised to ensure it leads to proficiency (American Psychological Association, 2009; Campbell & Fox, 2010; Price, 2008; Sammons, 2010). This model includes a minimum 400 hours of didactic training in the areas of (a) basic science (b) neurosciences (c) physical and laboratory assessment (d) clinical and research pharmacology (e) pharmacotherapeutics (f) research design and (g) professional ethics (American Psychological Association, 2009; Resnick, Ax, Fagan, & Nussbaum, 2012; Sammons, 2010). Moreover, trainees must receive the appropriate clinical supervision dictated by the state licensure board, pass the Psychopharmacology Examination for Psychologists (PEP), and undergo continuing education to demonstrate and maintain competency (American Psychological Association, 2009; Bricklin & Ciuccio, 2003; Campbell & Fox, 2010; McGrath & Muse, 2010). The American Psychological Association (2011), which is the largest professional association for psychologists, has reaffirmed their support for RxP by developing guidelines to regulate the use of psychopharmacology.

Opponents to RxP argue the training for psychologists is inferior to those attending medical, nursing, optometry, dentistry, physician assistant and pharmacy schools because psychologists have minimal bachelor's level experience in the physical sciences (Ball, Kratochwill, Johnston, & Fruehling, 2009; Heiby, DeLeon, & Anderson, 2004; Heiby, 2010; Robiner et al., 2003). The medical community also argues only full medical training is sufficient to prescribe medication (Brown, 2003; Hayes, Walser, & Bach, 2002; Hayes, Walser, & Follette, 1995). Thus, opponents of RxP claim prescriptive authority would allow psychologists to use treatment methods in which they are not trained (Ball et al., 2009; Hayes et al., 2002). The implication of substandard training for prescriptive authority would be a risk to the general public (DeNelsky, 1996; Long, 2005; Price, 2008). This argument will be explored later in this article.

Proponents argue the post-licensure training proposed by the APA is sufficient considering the pharmacology training required for psychologists' is said to be equal to that of nurse practitioners and physicians (Fox et al., 2009; Ball et al., 2009; Muse & McGrath, 2010). McGrath and Muse (2010) challenge Heiby's (2010) premise of inferior training for psychologists. However, even if Heiby (2010) and Robiner et al. (2003) are correct about the other prescribing professionals receiving more training in the natural sciences and systems, the proponents of RxP only wish to prescribe psychotropic medications, so the full medical training may not be necessary (Evans, 2003). Evans (2003) noted Robiner's (2003) data was confounded and ignored their counterevidence. For example, undergraduate training in the natural sciences and psychopharmacology readings may not be necessary to be a competent prescriber (Evans, 2003).

In respect to training, a parallel can be drawn between psychologists and optometrists. Optometrists are permitted to prescribe medication for eye-related diseases in all 50 states even though they have very different training than ophthalmologists (Wallis & Wedding, 2004). Psychologists are experts in psychopathology, which makes psychologist's training more consistent with the psychiatric model. Once the training is established to be adequate, the more appropriate question then becomes, "Does the training proposed by the American Psychological Association provide a minimum level of competency to ensure the safety of the general public?" (McGrath & Muse, 2010).

Consumer Safety Issue

As noted above, opponents of RxP suggest it would be harmful to patients due to lack of sufficient medical training, and only complete medical training would be acceptable for providing the requisite expertise (Ball et al., 2009; Heiby, 2010). There is the potential risk of overlooking other medical problems, which can be similar to mental health problems (Ball et al., 2009). Psychiatrists and other prescribing professionals run at least an equal risk of ignoring personality factors. This will be discussed later in the paper.

As noted above, the issue of training can come down to a minimum threshold of competency. Proponents of RxP would suggest this argument is best defined as a fear appeal designed to dissuade legislators, activists, and the medical and psychological communities from supporting prescriptive authority (Duke, Pickett, Carlson, & Grove, 1993; Witte & Allen, 2000). Fear appeals can be both misleading and unethical (Duke et al., 1993; Lee, 2011).

Critics of prescriptive authority have suggested prescriptive authority would lead to harm to the patients involved. The best way to counteract this statement is to evaluate the danger posed by psychologists who currently prescribe medication. Over 1,500 psychologists have received training for prescriptive authority (Resnick et al., 2012). The 10 prescribing psychologists from the PDP received adequate training, became well integrated with other members of the treatment team and showed without exception, clinical psychologists were competent in prescribing and did so with more efficiency than other medical trained professionals (Ball et al., 2009; Cox & Ellis, 2003; General Accountability Office, 1999). Louisiana and New Mexico have 70 psychologists who have been certified to prescribe psychotropic medication. Cumulatively, they have written over 250,000 prescriptions without any incident (Fox et al. 2009). Psychologists in the Indian Health Services network have been effectively serving their patients for roughly two and a half decades (DeLeon, Folen, Jennings, Willis, & Wright, 1991; Sammons, 2010; Tilus, 2008). As a whole, psychologists have been safely prescribing medication for 25 years.

The overall proficiency of practitioners develops with additional years of experience and continued professional education (Chreptaviciene & Starkute, 2010; Neimeyer, Taylor, & Wear, 2009). However, licensure refers to a set of privileges acquired through demonstrating a minimal competency as per the state board (Rubin et al., 2007). It is both illogical and potentially damaging to the value of having a professional license if one were to challenge prescribing psychologists' competency on the premise that other licensees have more hours or years of experience.

Need for RxP

There are many individuals in need of mental health services who are currently underserved (Ax et al, 2008). The populations who typically suffer from a shortage of available mental health professionals, particularly those who can prescribe psychotropic medications, are those in the military, prison system, and in rural areas (Fagan et al., 2004; Harowski et al., 2006; Thorne, 2009). Primary care providers supply around 60% of mental health care in underserved areas (Geller, 1999; as stated in Harowski et al., 2006).

The overall rate of mental illnesses in rural areas, such as depression was found to be similar to urban areas, but diagnosis and treatments were significantly divergent (Rost, Williams, Wherry, and Smith, 1995). These researchers found rural areas experienced

reduced detection of depression, higher rates of inappropriate medication management, and lower referral rates to mental health providers than in urban communities (Rost et al., 1995). This reveals a need for increased services by psychologists to address this concern.

Opponents of RxP believe the underserved will remain underserved due to limited assets accessible to hire and to provide training for these professionals (Ball et al., 2009). Moreover, few psychologists have chosen to practice in these locations and RxP will not change this (Westra et al., 2006). Ball and colleagues (2009) argue practitioners in these areas are unlikely to pursue prescriptive authority due to high financial investments and the time it would take away from their responsibility to serve their current patients. DeNelsky (1996) argues there is no adequate evidence of insufficient access to psychotropic medications in rural areas. Consequently, collaboration with other prescribing professionals would do more than RxP with regards to the needs of these populations (Westra et al., 2006).

The proponents of RxP suggest prescriptive authority would offer improved access for the underserved (Ax et al., 2008; Ball et al., 2009; Fagon, Ax, Liss, Resnick, & Moody, 2007; Harowski et al., 2006). For example, prescribing psychologists can be useful in rural communities that lack psychiatrists to serve their psychotropic medication needs (Harowski et al., 2006). Secondly, psychologists already working with underserved populations would be inclined to obtain these privileges to expand their scope of practice and newly trained psychologists might be interested in beginning their careers in underserved areas (Ball et al., 2009). The United States Military and Sante Fe Indian Health Services serve as examples of how prescriptive authority can improve the quality of care in underserved areas (Ax et al., 2008; McGrath, 2010; Moore, 2010).

Prescribing psychologists can provide the appropriate diagnosis and prescriptions as well as a sufficient follow up and monitoring of compliance and possible side effects integrated with the therapeutic process (Harowski et al., 2006). This benefit seems to be accepted and agreed upon by most psychologists. In a 2007 survey, the majority of members of the profession believe RxP would allow better services to certain subsets of the population (Fagan et al., 2007).

What about the Other Prescribing Professionals

Opponents of RxP feel psychiatrists and medical professionals can take care of any need for medical and mental health service. Hence, there is no need for psychologists to prescribe medication (Westra, Eastwood, Bouffard, & Gerritsen, 2006). If medication were necessary, then collaboration with a psychiatrist or other medical professional would suffice in order to help the patient (Dobson & Dozois, 2001; Stuart & Heiby, 2007; Westra et al., 2006). Heiby (2002) suggests collaboration of mental health treatment is already used and it is said to be of high quality and cost effective as opposed to a "medical" psychologist. Moreover, collaboration between psychologists and medical professionals, which all professionals benefit from, could be negatively affected by the RxP conflict (DeNelsky, 1996).

Proponents of RxP believe better patient care supersedes the desire to defer to other prescribing professionals (Ax et al., 2008; Ax, Fagan, & Resnick, 2009; Fox et al., 2009). Managed care has also marginalized doctors by limiting them to 15-minute sessions, which is usually spent on diagnosis, monitoring side effects, and psychoeducation (Ball et al., 2009; Brown, 2003; Goin, 2001; McGrath, 2004; Regestein, 2000). Some

researchers report sessions as short as 10 minutes (Olfson, Marcus, & Pincus, 1999). The intervals between sessions can range anywhere between 1 and 6 months (Oliveira-Berry, DeLeon, & Jennings, 2004). Regestein (2000) suggested managed care would also lead to less psychiatrists engaging in psychotherapy and less medical students becoming psychiatrists.

Regenstein (2000) was correct on both points. Although psychiatrists have been traditionally trained to provide psychotherapy, only about 10% of psychiatrists engage in psychotherapy (Mojtabai, & Olfson, 2008). Medicals students also have little respect for the psychiatry specialization (Insel, 2012; Robertson et al., 2009). The American Psychiatric Association (2012) recently found the number of medical school students specializing in psychiatry has been declining consistently in the past several years. As a result, there is a shortage of psychiatrists serving non-urban settings (American Psychiatric Association, 2012; Kapalka, 2006). Moreover, these time restrictions on physicians have led to current psychiatrists and general practitioners prescribing more medication, inappropriate medication, and being used as a "quick fix" by their patients (Bush, 2002). It is worth noting that even where there is disagreement about the level of access available in rural areas, access to psychiatrists will continue to decline in these same parts due to declining numbers of psychiatrists coming out of training. Thus, prescriptive authority should not be opposed using the "access to care" argument.

The compromised ability of primary care physicians to diagnose and assess mental illnesses can negatively impact the quality of patient care (Dozois & Dobson, 1995; Smith, 2012). As noted above, collaborative relationships with mental health professionals would be beneficial and lead to more effective diagnosis and care of patients in need of medications (Harowski, Turner, Levine, Schank, & Leichter, 2006). Few primary care physicians who prescribe psychotropic medications actually collaborate and consult with mental health care professionals (Ball et al., 2009). Research suggests one out of five Americans take psychotropic medications (Smith, 2012). Kubiszyn and Carlson (1995) found less than 80% of therapists had been contacted by a physician about appropriate treatment for a patient receiving split treatment and 60% had been asked by a physician to perform an evaluation. Smith (2012) found a surge in inappropriate and ineffective prescribing of psychotropic medication amongst non-psychologists.

Prescribing psychologists can use the skill of psychotherapy combined with the use of psychotropic medication when necessary. Naturally, psychotherapy should be the first line of treatment and psychotropic medication can be used as an adjunctive treatment. The combination of psychotherapy and medication has greater efficacy then psychotropic medications alone for many conditions (Ball et al., 2009; Cox & Ellis, 2003). This integrated approach can lead to more successful psychotherapy outcomes, improved cost effectiveness, and efficiency for patients (Ball et al., 2009; Bush, 2002; Cox & Ellis, 2003).

Psychologists meet with patients for longer sessions (typically 45 min to 1hr), much more frequently (typically weekly), and are more skilled in assessing the impact of medication treatment on mental status and emotional functioning (Barnett, 2000; Oliveira-Berry, DeLeon, & Jennings, 2004; Stuart & Heiby, 2007). Psychologists view psychotherapy as the first line treatment. As a result, prescriptive authority would also permit psychologists to reduce or completely eliminate the use of medications when appropriate (DeLeon & DeNelsky 1993).

Patients would also receive treatment in one location, by one provider, which will remove the burden of having to go to two separate appointments (split-treatment) with different providers (Burns, Rey & Burns, 2008; Johnson, 2009; Stuart & Heiby, 2007). This will reduce the need for collaboration with medical providers. This is extremely important because researchers have found minimal to no communication between the prescribing professional and the clinician (Avena & Kalman, 2010). This finding decreases the quality of care and increases the risk of harm to the patient (Avena & Kalman, 2010). Thus, the passage of legislation to permit prescriptive authority would reduce the rate of inappropriate prescribing, discrepant information to practitioners, and ethical concerns faced with sharing personal health information (Balon, 2001; Lazarus, 2001). Kapalka (2006) stated his RxP training led to him being able to take a proactive approach in collaboration with pediatricians regarding medication concerns and provide training to nursing staff in the hospital. Thus, RxP training might be useful towards providing informed recommendations to physicians to ensure the best care for our patients when permitted by state law.

Safety Concerns Related to General Practitioners and Psychiatrists

Heiby (2010) challenged psychologists' amount of knowledge of the biological bases of behavior and use this as one basis of opposing RxP. Supporters of RxP are equally concerned about general practitioners, who currently prescribe the vast majority of psychotropic medication, do not have adequate knowledge of the interplay between psychological disorders and their appropriate medications (Balon, 2001; Cox & Ellis, 2003; Marra, 1994; Rubio-Valera et al., 2012). In addition to the biological considerations, a practitioner is required to evaluate a patient's psychological, developmental, environmental, and relational factors before formulating a diagnosis and subsequent treatment. General physicians receive 90 hours of behavioral science education in their training. This limits their ability to accurately assess and diagnose mental health problems (Chafetz & Buelow, 1994; as stated in Cox & Ellis, 2003). The physician's training in behavioral science is almost 4.5 times less than the didactic training in pharmacology proposed by the American Psychological Association (2009).

As noted above, there are significant differences in individual session length and intervals between sessions for a psychologist, psychiatrist, and general physicians (Barnett, 2000; Oliveira-Berry, DeLeon, & Jennings, 2004). Psychologists traditionally see a patient for 45 minutes. Whereas a psychiatrist/physician sees a patient for 15 minutes. If a psychologist sees a patient weekly and a psychiatrist/physician sees a patient monthly, psychologists would spent 12 times the amount of time with their patient than other prescribing professionals. This difference in time jumps to 36 times the exposure for a provider that sees a client quarterly and 72 times the exposure for practitioners that see clients every 6 months. Because psychologists generally have greater exposure, more frequent sessions, and increased awareness of their patients, a patient would have a more difficult time seeking out prescriptions by multiple providers (referred to as "doctor shopping").

But Do Psychologists Want RxP

A compelling case has been made for the effectiveness, safety, and need for psychologists to obtain prescriptive authority. However, one might ask whether psychologists want prescriptive authority? This is a very tough question to address because there is a very strong divide between the proponents and opponents who publish on the topic (Fox et al., 2009; Heiby et al, 2004; Heiby & Bush, 2002; McGrath & Sammons, 2011; Robiner et al., 2003). The writers of the present article believe the best

way to explore this question is to analyze the studies exploring the views of psychologists, students, and training directors.

Bascoe and Zlotowski (1981) found psychologists in Pennsylvania were largely not interested in pursuing prescriptive authority. However, there has been a consistent increase of support for RxP by psychologists since 1981 (Sammons et al., 2000). Between 1990 and 2000, researchers found the psychology community to be more favorable. Support generally ranged from55 to 72% (Grandin & Blackmore, 2006; Sammons et al., 2000). Even Pennsylvania, which was the basis of the 1981 study, increased their support for RxP to 73% in favor and 18% opposed (Bascue & Zlotowski, 1981; Knapp & Bowers, 1997). Fagan and colleagues (2007) reported 64% of psychologists in independent practice supported prescription privileges, 21% opposed, and 14% were undecided about APA's desire to pursue prescriptive authority based on a survey disseminated in 2004.

Seventy-two percent of interns supported, 16% opposed, and 13% were undecided about APA's desire to pursue prescriptive authority in 1995 (Ax, Forbes, & Thompson, 1997). This study was replicated in 2000 and the researchers found 69% of interns continued to support RxP, 16% opposed and 15% were undecided about RxP (Fagan et al., 2004). The survey conducted in 2004 revealed 62% of interns and 71% of post-doctoral residents supported, 16% of interns and 5% of post-docs opposed prescription privileges, and 20%post-doctoral residents supported and 22% of interns were undecided about prescriptive authority (Fagan et al., 2007).

Research also found 72% of training directors supported, 18% opposed, and 11% were undecided about APA's desire to pursue prescriptive authority in 1995 (Ax, Forbes, &Thompson, 1997). In 2000, the support for RxP went down to 62%, opposition went up to 20%, and uncertainty went up to 17% (Fagan et al., 2004). In 2004, 59% of directors supported, 24% opposed, and 16 % were undecided about APA's desire to obtain RxP (Fagan et al., 2007).

As the statistics above reveal, the vast majority of psychologists support RxP (Ax et al., 1997; Sammons et al., 2000; Fagan et al., 2004; Fagan et al., 2007). However, there are still others who are undecided about RxP. Barnett and Neel (2000) felt training in pharmacology is essential for psychologists to provide effective treatment and supervision, regardless of the outcome of this debate.

Walters (2001) did a meta-analysis of 17 articles addressing whether competently trained psychologists should prescribe, whether APA should support RxP legislation, and whether the individual would personally seek prescriptive authority. The researcher found if the 3 questions were combined, there is a noticeable split between those who support or oppose prescriptive authority (Walters, 2001). However, careful analysis revealed the vast majority (60% of respondents) agree; whereas 31% disagree with the statement "competently trained psychologists should prescribe" (Walters, 2001). This makes a 2:1 ratio in favor of obtaining prescriptive authority. In summary, the vast majority of interns, post-doctoral fellows, training directors, and independent practitioners support APA's initiative to obtain prescriptive authority for psychologists.

Cost-Benefit Analysis of RxP

Readers might ask themselves at this point, "Is it worth it to pursue RxP?" There are a number of ways of approaching this question. The authors choose a cost-benefit

analysis as most comprehensive as it subsumes multiple arguments. The debate associated with the risks of prescriptive authority are presented and followed by the potential gains of supporting this initiative.

Financial Implications. Critics of RxP state there would be extremely high costs for implementing programs for training and teaching as opposed to utilizing currently accessible medical professionals (Heiby & Bush, 2002; Wagner, 2002; Westra et al., 2006). Proponents of RxP have suggested different models of training. A financially practical model suggested was to incorporate RxP training in the pre-doctoral curriculum (Ax et al., 2009; Resnick, Ax, Fagan, & Nussbaum, 2012). Nevertheless, the dominant view is to keep this training as a post-licensure sequence. Vector Research (1996) reported the PDP program was indeed effective. The writers of this article do not believe RxP should be opposed based on this logic. Moreover, opposing RxP on the cost of training would be an infringement on the rights of a psychologist to legally spend their money in any fashion they see fit.

Loss of Identity .A second criticism of the RxP movement is prescriptive authority could lead to a loss of identity (Brown, 2003; Dobson & Dozois, 2001;Dozois & Dobson, 1995; Mantell, Ortiz, & Planthara, 2004; Robiner et al., 2002; Stuart & Heiby, 2007). The added training and responsibility would take away from psychotherapy which clinical psychologists effectively use (Cox & Ellis, 2003). This could water down the quality of care and credibility of the field (Boswell & Litwin, 1992; Dozois & Dobson, 1995; Bush, 2001). Opponents of RxP further question, "What stops psychologists from behaving in a similar way as psychiatrists?" (McGrath et al., 2004). The general risk is this training could lead to putting an overemphasis on biological factors, which deviates from the general focus on psychological processes (Dozois & Dobson, 1995; Levine & Schmelkin, 2006; McGrath et al., 2004)

Proponents of RxP note there is a significant distinction between supporting prescriptive authority as a reasonable specialization within the field of psychology similar to a Forensic Psychologist, a Neuropsychologist, a School Psychologist, and so forth. Individuals who practice in these areas have the appropriate training to call themselves psychologists, but choose to become competent in a specialty area. With this being said, a "medical psychologist" or "prescribing psychologist" is still a psychologist.

The RxP training need not be compulsory for all psychologists. This will have a protective effect for the professional identity of psychologists (Newman, 1995). Many proponents of RxP do not wish to go through the training program (Walters, 2001). Wiggins and Wedding (2004) found only 5% of nurse psychologists (dually trained as psychologists and nurses) pursued prescriptive authority. Even the students surveyed, who support RxP, felt it should not be mandatory for all psychologists (Grandin & Blackmore, 2006). These factors come together to demonstrate loss of professional identity as an argument against RxP is baseless (Ball et al., 2009; McGrath et al., 2004; Newman, 1995; Nussbaum, 2001; Resnick, 1996; Wiggins & Wedding, 2004).

Increased Cost of Services. Opponents note there may also be an elevated cost of practice for psychologists. As a result, psychologists might increase fees for service, which would reduce access for patients who may be in need of these services (Cox & Ellis, 2003; DeNelsky, 1996). Because of the lack of parity, psychologists' rates would still be less than psychiatrists. This rationale is also consistent with the finding that psychotherapy rates are lower in Master's level mental health providers than

psychologists (Caccavale, 2002; McGrath & Sammons, 2011). Consequently, prescriptive authority for psychologists will still be a financially beneficial experience for the patient (Ax et al., 2008).

Insurance and Malpractice Issues. Insurance premiums may also rise due to the possibility of malpractice (Brentar & McNamara, 1991; DeNelsky, 1996; Stuart & Heiby, 2007). Psychologists would be medically liable for the prescriptions they write and may face consequences. If only a few malpractice suits against these prescribing psychologists result due to inadequate medical training, the insurance would raise considerably (DeNelsky, 1996; Stuart & Heiby, 2007; Westra et al., 2006). The APA insurance trust stated only individuals with prescriptive authority would have increases in premiums (American Psychological Association, 1991). Wiggins and Wedding (2004) also counter this argument by exploring Nurse Psychologists who prescribe. They found prescribing nurse psychologists had lower insurance premiums than licensed psychologists who did not prescribe. It is essential to weigh these risks against the potential benefits of RxP.

Increased Accessibility and Quality of Care. As noted above, RxP has the potential to fill a void of psychological and psychiatric services to the military, prison system, and in rural areas (Fagan et al., 2004; Harowski et al., 2006; Thorne, 2009). Moreover, the increased duration and reduced interval between contact between the patient and their provider could lend itself to increased quality of care, fewer medication errors, reduction of split services, and amelioration of doctor shopping (Balon, 2001; Barnett, 2000; Lazarus, 200; Oliveira-Berry et al., 2004).

Development of Psychology. The state of mental health treatment has changed drastically in the past 50 years. Researchers have been able to identify safer and more effective pharmacological treatments (Lavoie & Barone, 2006). In addition, the number of career paths providing training for mental health and psychiatric services has also expanded (DeLeon, 2008). Psychologists, social workers, mental health counselors, psychoanalysts, behavioral analysts, substance abuse counselors, and several others provide psychotherapy (Lavoie & Barone, 2006). Prescribing professionals include primary care physicians, physician's assistants, nurse practitioners, psychologists, and several others (Fox et al., 2009; Lavoie & Barone, 2006).

At the current time, no single provider has exclusive rights to prescriptive authority or psychotherapy. Every profession desires to expand their scope of proficiency and practice to remain relevant to address the rapid changes in health care (DeLeon, 2008). Psychologists are also faced with this problem. Psychotherapy services, which were once designated for psychologists, are going to other providers offering low-cost services (Caccavale, 2002; McGrath & Sammons, 2011).

Proponents suggest these privileges are simply the natural progression of the psychology field (Ax et al., 2009). Psychology has evolved into a major health care profession looking to expand its scope of practice into new areas, new opportunities and new branches (Norfleet, 2002). RxP would allow for this as well as for new innovations of clinical psychological services within the original realm of mental health care (DeLeon, Fox, & Graham, 1991). Psychologists need to be knowledgeable of psychotropic medications because the number of patients who are already on medication (Norfleet, 2002). As a result, training in psychopharmacology is a natural development of psychology.

Economic Survival. Psychology has the potential to thrive economically with the addition of prescription privileges in today's competitive managed-care market as well as contribute to the survival of psychology as a profession (Caccavale, 2002). Opponents of RxP believe that becoming a prescribing psychologist would lead to loss of identity because it could replace psychotherapy. Moreover, opponents believe this will open the floodgates for other professions such as social workers and mental health counselors (Westra et al., 2006). Most psychologists agree their identity and survival is already in trouble from competing mental health professionals who provide similar services at lower rates (Ball et al., 2009). Increasing the role of psychologists in the health care system, which places more emphasis on psychopharmacological treatment over psychotherapy, would go far to help the promote survival of psychology as a profession (Ball et al., 2009).

Conclusions

Research suggests a significant gap in mental health and psychiatric services to prisoners, military personnel, rural communities, and non-English speakers in the United States (Fagan et al., 2004; Harowski et al., 2006; Thorne, 2009). Moreover, fewer medical professionals are specializing in psychiatry (American Psychiatric Association, 2012; Insel, 2012; Kapalka, 2006; Mojtabai, & Olfson, 2008; Robertson et al., 2009). As a result, the vast majority of psychiatric services are provided by general practitioners. who have minimal training in mental illness (Harowski et al., 2006; Kubiszyn & Carlson, 1995). Having general practitioners prescribe psychotropic medication has led to larger intervals between service and errors in medication management (Balon, 2001; Barnett, 2000; Cox & Ellis, 2003; Marra, 1994; Oliveira-Berry et al., 2004; Rubio-Valera et al., 2012; Smith, 2012). This would suggest a need for additional prescribing professionals. Proponents of RxP highlight this gap in service as one of primary benefits of allowing psychologists to prescribe psychotropic medication (Ax et al., 2008; McGrath, 2010; Moore, 2010). Opponents challenge this argument by suggesting psychologists are not going to fill this void even if RxP is supported (Ball et al., 2009; Westra et al., 2006). However, the prescribing psychologists who were trained by the Psychopharmacology Demonstration Project, in the Indian Health Services, Louisiana, and New Mexico work in underserved populations. Moreover, with the decreasing number of medical school students seeking training in psychiatry, this gap in services will only become more pronounced if RxP continues to be opposed.

The next major debate is whether the APA's proposed curriculum effectively trains psychologists to serve as prescribing professionals. Opponents claim the curriculum is inadequate in both didactic and experimental training (Ball et al., 2009; Heiby et al., 2004; Heiby, 2010; Robiner et al., 2003). Consequently, psychologists could have an increased likelihood of making medication errors (DeNelsky, 1996; Long, 2005; Price, 2008). Proponents of RxP note the graduate-level training is equivalent to nurse-practitioners and physicians (Muse & McGrath, 2010). Even if these researchers ignore undergraduate education, research has found undergraduate education has minimal impact on the quality of a practitioner (Evans, 2003; McGrath & Muse, 2010). Finally, RxP has over 25 years of safe prescribing history (Buie, 1989; DeLeon et al., 1991; Sammons, 2010; Tilus, 2008).

Opponents of prescriptive authority contend this issue is still divisive and psychologists do not wish to seek prescriptive authority. Some opponents even suggest RxP was pushed by a small group that had less than altruistic intentions. This argument seems to

be the weakest proposed by the opposition. Research suggests support for RxP has increased significantly since it was initially proposed. Studies before the 1990s tend to yield lower support than more recent studies (Sammons et al., 2000; Walters, 2001). In fact, support for RxP by interns, post-doctoral fellows, training directors and private practitioners ranges between 50 and 70 percent (Ax et al., 1997; Fagan et al., 2004; Fagan et al., 2007). In contrast, the opposition to RxP hovers around 20-30% (Ax et al., 1997; Fagan et al., 2004; Fagan et al., 2007).

Lastly, proponents and opponents of RxP are divided over the risks and benefits of RxP. Opponents of RxP, tend to emphasize the drawbacks of RxP (Bush, 2004). Their arguments include patient safety, cost of training, loss of identity, and increased insurance premiums (DeNelsky, 1996; Stuart & Heiby, 2007; Robiner et al., 2003; Westra et al., 2006). The proponents tend to emphasize the benefit to society and psychology alike. Their arguments include increased quality and availability of services, extension of the scope of psychological training and practice, and increased economic opportunities (Ax et al., 2008; Fox et al., 2009; Lavoie & Barone, 2006; Norfleet, 2002).

The results of these findings suggest an overwhelming momentum in favor of RxP. With this in mind, the writers of this paper believe the energy spent in opposition of RxP could be spent on: (a) developing regulations on the RxP curriculum (b) developing initiatives to increase prescribing psychologists desire to work in underserved areas and (c) determining whether psychologists should have independent prescriptive authority or require the supervision of a psychiatrist or other medical doctor.

References

- Alpert, M., Angrist, B., Clayton, P. J., Conners, K., Endicott., J., Janowsky, D. S., et. al. (2000). The Department of Defense Psychopharmacology Demonstration Project: The ACNP evaluation report and final summary. *ACNP Bulletin*, 6, 1-52.
- Avena, J., & Kalman, T. (2010). Do psychotherapists speak to psychopharmacologists? A survey of practicing clinicians. *Journal of the American Academy of Psychoanalysis & Dynamic Psychiatry*, *38*(4), 675-683. doi:10.1521/jaap.2010.38.4.675.
- American Psychiatric Association (2012). Fewer medical school seniors electing psychiatry according to the American Psychiatric Association. Retrieved on June 25, 2012 from http://www.psychiatry.org/advocacy--newsroom/news-releases.
- American Psychological Association (1991). *Practice: Only prescribers would see higher malpractice rates*. Washington, District of Columbia, US: American Psychological Association (APA).
- American Psychological Association (2009). Recommended postdoctoral education and training program in psychopharmacology for prescriptive authority. Washington, DC: Author.
- American Psychological Association (2011). Practice guidelines regarding psychologists' involvement in pharmacological issues. *American Psychologist*, *66*(9), 835-849. doi:10.1037/a0025890
- Ax, R. K., Fagan, T. J., & Resnick, R. J. (2009). Predoctoral prescriptive authority training: The rationale and a combined model. *Psychological services*, *6*(1), 85-95.
- Ax, R.K., Forbes, M. R. & Thompson, D.D. (1997). Prescription privileges for psychologists: A survey of predoctoral interns and directors of training. *Professional Psychology: Research and Practice*, *28*, 509-514.

Ax, R. K., Bigelow, B., Harowski, K., Meredith, J. M., Nussbaum, D., & Talor, R. R.(2008). Prescriptive authority for psychologists and the public sector: Serving underserved health care consumers. *Psychological Services*, *5*(2), 184-197.

- Ball, C. R., Kratochwill, T. R., Johnston, H. F., & Fruehling, J. (2009). Limited prescription privileges for psychologists: Review and implications for the practice of psychology in the schools. *Psychology in the Schools*, *46*(9), 836-845.
- Balon, R. (2001). Positive and negative aspects of split treatment. *Psychiatric Annals*, 31(10), 598-603.
- Barnett, J. E., & Neel, M. L. (2000). Must all psychologists study psychopharmacology? *Professional Psychology: Research and Practice*, 31, 619 – 627.
- Bascue, L. O., & Zlotowski, M. (1981). Psychologists' attitudes about prescribing medications. Psychological Reports, 48, 645-646.
- Boswell, D. L., & Litwin, W. J. (1992). Limited prescription privileges for psychologists: A 1-year follow up. *Professional Psychology: Research and Practice*, *23*(2), 108-113. doi:10.1037/0735-7028.23.2.108
- Brentar, J., & McNamara, J. R. (1991). The right to prescribe medication: Considerations for professional psychology. *Professional Psychology: Research and Practice*, 22(3), 179-187. doi:10.1037/0735-7028.22.3.179
- Bricklin, P. M., & Ciuccio, J. (2003). Psychopharmacology examination for psychologists developed by the American Psychological Association Practice Organization's College of Professional Psychology. In M. T. Sammons, R. Paige, R. F. Levant (Eds.) *Prescriptive authority for psychologists: A history and guide* (pp. 179-189). Washington, DC US: American Psychological Association. doi:10.1037/10484-010
- Brown, L. S. (2003). Doubts about prescribing. In M. T. Sammons, R. Paige, R. F. Levant (Eds.), *Prescriptive authority for psychologists: A history and guide* (pp. 47-58). American Psychological Association.doi:10.1037/10484-003
- Buie, J. (1989). Prescribing at IHS: A political tightrope. Monitor,
- Burns, W. J., Rey, J., & Burns, K. A. (2008). Psychopharmacology as practiced by psychologists. In M. Hersen, A. M. Gross (Eds.), *Handbook of clinical psychology, vol 1: Adults* (pp. 663-692). Hoboken, NJ US: John Wiley & Sons Inc.
- Bush, J. (2001). SSCP Task Force Statement on Prescribing Privileges (RxP). London, Ontario, US: APA Division 12, Society of Clinical Psychology, Section III Society for a Science of Clinical Psychology.
- Bush, J. W. (2002). Prescribing privileges: Grail for some practitioners, potential calamity for interprofessional collaboration in mental health. *Journal of Clinical Psychology*, *58*(6), 681-696.
- Caccavale, J. (2002). Opposition to prescriptive authority: Is this a case of the tail wagging the dog? *Journal of Clinical Psychology*, *58*(6), 623-633.
- Campbell, L. F., & Fox, R. (2010). The evolution of training guidelines in pharmacotherapy for psychologists. In R. E. McGrath, B. A. Moore (Eds.), *Pharmacotherapy for psychologists: Prescribing and collaborative roles* (pp. 29-47). Washington, DC US: American Psychological Association. doi:10.1037/12167-002
- Chafetz, M.D. & Buelow, G. (1994). A training model for psychologists with prescription privileges: Clinical pharmacopsychologists. *Professional Psychology: Research and Practice*, 25, 149-153.
- Chreptaviciene, V., & Starkute, J. (2010). The model of cohesions between career and competence. (2010). *Engineering Economics*, *21*(5), 537-549.
- Cox, D. E., & Ellis, J. B. (2003). Prescriptive authority for clinical psychologists: A review of the debate. *Social behavior and personality*, *31*(3), 275-282.
- Cullen, E. A., & Newman, R. (1997). In pursuit of prescription privileges. *Professional Psychology, Research & Practice, 28(2),* 101.

DeLeon, P. (2008). *A vision for the future: Integrated care*. Mesa, Arizona, US: APA Division 29, Psychotherapy.

- DeLeon, P.H., Folen, R.A., Jennings, F.L., Willis, D.J., & Wright, R.H. (1991). The case for prescription privileges: A logical evolution of professional practice. *Journal of Clinical Child Practice*, *20*(3), 254-267. doi:10.1207/s15374424jccp2003_4
- DeLeon, P.H., Fox, R.E. & Graham, S.R. (1991). Prescription privileges psychology's next frontier? *American Psychologist*, 40(4), 384-393.
- DeLeon, P. & DeNelsky, G. (1993). The prescription privileged debate: Will privileges advance psychology? *The National Psychologist*, *2*, 12-13
- DeLeon, P., & Sammons, M. (2010) . *Highest possible quality of care: Change is coming*. Rolfe, Iowa, US: Iowa Psychological Association (IPA).
- DeNelsky, G. Y. (1996). The case against prescription privileges for psychologists. *American Psychologist*, *51*(3), 207-212. doi:10.1037/0003-066X.51.3.207
- Dobson, K. S., & Dozois, D. A. (2001). Professional psychology and the prescription debate: Still not ready to go to the altar. *Canadian Psychology/PsychologieCanadienne*, *42*(2), 131-135. doi:10.1037/h0086888
- Dozois, D. A., & Dobson, K. S. (1995). Should Canadian psychologists follow the APA trend and seek prescription privileges?: A reexamination of the (R)evolution. *Canadian Psychology/PsychologieCanadienne*, *36*(4), 288-304. doi:10.1037/0708-5591.36.4.28
- Duke, C. R., Pickett, G. M., Carlson, L., & Grove, S. J. (1993). A method for evaluating the ethics of fear appeals. *Journal of Public Policy & Marketing*, *12*(1), 120-129.
- Evans, G. D. (2003). Crafting science for political agendas: A response to Robiner et al. *Journal of Clinical Psychology in Medical Settings*, *10*(3), 223-229.
- Fagan, T. J., Ax, R. K., Liss, M., Resnick, R. J., &Moody, W. (2007). Prescriptive authority and preferences for training. *Professional Psychology: Research and Practice*, 38, 104–111.
- Fagan, T. J., Ax, R. K., Resnick, R. J., Liss, M., Johnson, R., & Forbes, M. R. (2004). Attitudes among interns and directors of training: Who wants to prescribe, who doesn't, and why. *Professional Psychology: Research and Practice*, *35*, 345–356.
- Fox, R. E. (2008). Advocacy: The key to the survival and growth of professional psychology. *Professional psychology: Research and Practice*, 39(6), 633-637.
- Fox, R. E., & Sammons, M. T. (1998). A history of prescription privileges. APA Monitor. Retrieved December 21, 2007, from http://www.apa.org/monitor/sep98/prescrip.html.
- Fox, R. E., DeLeon, P. H., Newman, R., Sammons, M. T., Dunivin, D. L., & Baker, D. C. (2009). Prescriptive authority and psychology: A status report. *American Psychologist*, *64(4)*, 257-268.
- General Accountability Office (1999). Prescribing Psychologists: DOD Demonstration Participants Perform Well but Have Little Effect on Readiness or Costs: HEHS-99-98. *GAO Reports*, 1.
- Goin, M. (2001). Split treatment: The psychotherapy role of the prescribing psychiatrist. *Psychiatric Services*, *52*(5), 605-609. doi:10.1176/appi.ps.52.5.605
- Geller, J. M. (1999). Rural primary care providers' perceptions of their roles in the provision of mental health services: Voices from the plains. *Journal of RuralHealth*, 15, 326–334.
- Grandin, L. D., & Blackmore, M. A. (2006). Clinical psychology graduate students' opinions about prescriptive authority: A discussion of medical versus psychological training models. *Journal of Clinical Psychology In Medical Settings*, *13*(4), 403-414. doi:10.1007/s10880-006-9039-2

Harowski, K., Turner, A. L., LeVine, E., Schank, J. A., & Leichter, J. (2006). From our community to yours: Rural best perspectives on psychology practice, training and advocacy. *Professional psychology: Research and Practice*, *37*(2), 158-164.

- Hayes, S. C., Walser, R. D., & Bach, P. (2002). Prescription privileges for psychologists: Constituencies and conflicts. *Journal of Clinical Psychology*, *58*(6), 697-708. doi:10.1002/jclp.10054
- Hayes, S. C., Walser, R. D., & Follette, V. M. (1995). Psychology and the temptation of prescription privileges. *Canadian Psychology/PsychologieCanadienne*, *36*(4), 313-320. doi:10.1037/0708-5591.36.4.313
- Hayes, S., &Heiby, E. (1996). Prescription privileges: Does psychology need a fix? *American Psychologist*. *51*, 198–206.
- Heiby, E.M. (2002). Concluding remarks on the debate about prescription privileges for psychologists. *Journal of Clinical Psychology*, *58*, 709–722.
- Heiby, E. M. (2010). Concerns about substandard training for prescription privileges for psychologists . *Journal of clinical psychology, 66(1),* 104-111.
- Heiby, E. M., & Bush, J. (2002). Giving prescription privileges to psychologists would be a very dangerous experiment. Here are 10 reasons why. London, Ontario, US: APA Division 12, Society of Clinical Psychology, Section III Society for a Science of Clinical Psychology.
- Heiby, E. M., DeLeon, P. H., & Anderson, T. (2004). Debate on Prescription Privileges for Psychologists. *Professional Psychology: Research and Practice*, *35*(4), 336-344. doi:10.1037/0735-7028.35.4.336
- Insel, T. (2012). The future of psychiatry (= clinical neuroscience). National Institute of Mental Health. Retrieved on June 25, 2012 from http://www.nimh.nih.gov/about/director/2012/the-future-of-psychiatry-clinical-neuroscience.shtml
- Johnson, J. (2009). Whether states should create prescription power for psychologists. *Law & Psychology Review*, 33167-178.
- Kapalka, G. M. (2 006). *RxP and Evolution of Pediatric Practice and Hospital Organizational Change*. Washington, District of Columbia, US: American Psychological Association (APA).
- Kapalka, G. M. (2008). The RxP movement: A house divided. The Tablet, 9, 3-5.
- Knapp, S., & Bowers, T. G. (1997). Limited prescription privileges for psychologists: What are the wishes of psychologists? *The Independent Practitioner, 17,* 130-133.
- Kubiszyn, T., & Carlson, C. I. (1995). School psychologists' attitudes toward a expanded health care role: Psychopharmacology and prescription privileges. *School Psychology Quarterly*, *10*, 247-270.
- Lavoie, K., &Barone, S. (2006). Prescription privileges for psychologists: A comprehensive review and critical analysis of current issues and controversies. *CNS Drugs*, *20*(1), 51-66.
- Lazarus, J. A. (2001). Ethics in split treatment. Psychiatric Annals, 31(10), 611-614.
- Lee, S. (2011). Understanding truth in health communication. *Journal of Mass Media Ethics*, 26(4), 263-282. doi:10.1080/08900523.2011.581972
- Levine, E. S., & Schmelkin, L. (2006). The move to prescribe: A change in paradigm? *Professional Psychology: Research And Practice*, *37*(2), 205-209. doi:10.1037/0735-7028.37.2.205
- Long, J. (2005). Power to prescribe: The debate over prescription privileges for psychologists and the legal issues implicated. *Law & Psychology Review*, 29, 243-260
- Mantell, E., Ortiz, S. O., & Planthara, P. M. (2004). What price prescribing? A commentary on the effect of prescription authority on psychological practice.

- Professional Psychology: Research and Practice, 35(2), 164-169. doi:10.1037/0735-7028.35.2.164
- Marra, T. (1994). Should clinical psychologists have prescriptions in California? *Psychiatric Times*, *3*, 20-28.
- McGrath, R. E. (2004). Saving our psychosocial souls. *American Psychologist*, *59*(7), 644-645. doi:10.1037/0003-066X.59.7.644
- McGrath, R. E. (2010). Lessons from the trenches: Getting laws passed. In R. E. McGrath, B. A. Moore (Eds.), *Pharmacotherapy for psychologists: Prescribing and collaborative roles* (pp. 223-232). American Psychological Association.doi:10.1037/12167-012
- McGrath, R. E., & Muse, M. (2010). Commentary: Room for a new standard? Response to comments by Heiby. *Journal Of Clinical Psychology*, *66*(1), 112-115.
- McGrath, R. E., & Sammons, M. (2011). Prescribing and primary care psychology: Complementary paths for professional psychology. *Professional Psychology: Research and Practice*, *42*(2), 113-120. doi:10.1037/a0022649
- McGrath, R. E., Wiggins, J. G., Sammons, M. T., Levant, R. F., Brown, A., &Stock, W. (2004). Professional issues in pharmacotherapy for psychologists. *Professional Psychology: Research and Practice*, *35*(2), 158-163. doi:10.1037/0735-7028.35.2.158
- Mojtabai, R., & Olfson, M. (2008). National trends in psychotherapy by office-based psychiatrists. *Archives Of General Psychiatry*, *65*(8), 962-970. doi:10.1001/archpsyc.65.8.962
- Moore, B. A. (2010). The future of prescribing psychology. In R. E. McGrath, B. A. Moore (Eds.), *Pharmacotherapy for psychologists: Prescribing and collaborative roles* (pp. 233-239). American Psychological Association.doi:10.1037/12167-013
- Moyer, D.M. (1995). An opposing view on prescription privileges for psychologists. *Professional Psychology: Research and Practice, 26*, 586-590.
- Murray, B. (2003). *Presidential Program: A brief history of RxP*. Washington, District of Columbia, US: American Psychological Association (APA).
- Muse, M., & McGrath, R. E. (2010). Training comparison among three professions prescribing psychoactive medications: Psychiatric nurse practitioners, physicians, and pharmacologically trained psychologists. *Journal of Clinical Psychology*, 66(1), 96-103. doi:10.1002/jclp.20623
- Munsey, C. C. (2008). Prescriptive authority in the states: A look at which states allow RxP and which have considered it. Washington, District of Columbia, US: American Psychological Association (APA).
- Neimeyer, G. J., Taylor, J. M., & Wear, D. M. (2009). Continuing education in psychology: Outcomes, evaluations, and mandates. *Professional Psychology: Research and Practice*, *40*(6), 617-624. doi:10.1037/a0016655
- Newman, R. (1995). *Professional Point: Expanding our skills and services*. Washington, District of Columbia, US: American Psychological Association (APA).
- Norfleet, M. (2002). Responding to society's needs: Prescription privileges for psychologists. *Journal of Clinical Psychology*, *58*(6), 599-610. doi:10.1002/jclp.10057
- Nussbaum, D. (2001). Psychologists should be free to pursue prescription privileges: A reply to Walters. *Canadian Psychology/PsychologieCanadienne*, *42*(2), 126-130. doi:10.1037/h0086887
- Olfson, M., Marcus, S. C., & Pincus, H. (1999). Trends in office-based psychiatric practice. *The American Journal Of Psychiatry*, *156*(3), 451-457.
- Oliveira-Berry, J. M., DeLeon, P. H., & Jennings, R. R. (2004). The maturation of a profession. *Psychoanalytic Psychology*, *21*(4), 614-617. doi:10.1037/0736-9735.21.4.614

Pimental, P. A., Stout, C. E., Hoover, M. C., & Kamen, G. B. (1997). Changing psychologists' opinion about prescriptive authority: A little information goes a long way. *Professional Psychology: Research and Practice*, *28*(2), 123-127. doi:10.1037/0735-7028.28.2.123

- Pollitt, B. (2003). Fool's gold: Psychologists using disingenuous reasoning to mislead legislatures into granting psychologists prescriptive authority. *American Journal of Law & Medicine*, 29(4), 489-524.
- Price, M. (2008). *Div. 55's drive for RxP: The American Society for the Advancement of Pharmacotherapy pushes for prescriptive authority through training and advocacy.*Washington, District of Columbia, US: American Psychological Association (APA).
- Puente, A. E. (2011). Psychology as a health care profession. *American Psychologist*, 66(8), 781-792. doi:10.1037/a0025033
- Regestein, Q. R. (2000). Psychiatrists' views of managed care and the future of psychiatry. *General Hospital Psychiatry*, 22, 97-106.
- Resnick, R. J. (1996). *Take two and call me in the morning*. Washington, District of Columbia, US: American Psychological Association (APA).
- Resnick, R. J., Ax, R. K., Fagan, T. J., & Nussbaum, D. (2012). Predoctoral prescriptive authority curricula: A training option. *Journal of Clinical Psychology*, *68*(3), 246-262. doi:10.1002/jclp.20828
- Robertson, T., Walter, G., Soh, N., Hunt, G., Cleary, M., & Malhi, G. (2009). Medical students' attitudes towards a career in psychiatry before and after viewing a promotional DVD. *Australasian Psychiatry*, *17*, 311-317. doi: 10.1080/10398560902874298
- Robiner, W. N., Bearman, D. L., Berman, M., Grove, W. M., Colon, E., Armstrong, J. et al. (2002). Prescriptive authority for psychologists: A looming health hazard? *Clinical Psychology: Science and Practice*, *9*, 231–248.
- Robiner, W. N., Bearman, D. L., Berman, M., Grove, W. M., Colón, E., Armstrong, J. et al. (2003). Prescriptive authority for psychologists: Despite deficits in education and knowledge? *Journal of Clinical Psychology In Medical Settings*, *10*(3), 211-212. doi:10.1023/A:1025419114038
- Rost, K., Williams, C., Wherry, J., & Smith, G. R. (1995). The process and outcomes of care for major depression in rural family practice settings. *Journal of Rural Health*, *11*, 114–120.
- Rubin, N. J., Bebeau, M., Leigh, I. W., Lichtenberg, J. W., Nelson, P. D., Portnoy, S., et al. (2007). The competency movement within psychology: An historical perspective. *Professional Psychology: Research and Practice*, *38*(5), 452-462. doi:10.1037/0735-7028.38.5.452
- Rubio-Valera, M., Fernández, A., Luciano, J., Hughes, C., Pinto-Meza, A., Moreno-Küstner, B., et al. (2012). Psychotropic prescribing in Catalonia: results from an epidemiological study. *Family Practice*, *29*(2), 154-162.
- Sammons, M. T. (2010). The Psychopharmacology Demonstration Project: What did it teach us, and where are we now?. In R. E. McGrath, B. A. Moore (Eds.), *Pharmacotherapy for psychologists: Prescribing and collaborative roles* (pp. 49-67). American Psychological Association.doi:10.1037/12167-003
- Sammons, M. T., & Brown, A. B. (1997). The Department of Defense Psychopharmacology Demonstration Project: An evolving program for postdoctoral education in psychology. *Professional Psychology, Research and Practice, 28,* 107–112. doi:10.1037/0735-7028.28.2.107
- Sammons, M. T., Gorny, S. W., Zinner, E. S., & Allen, R. P. (2000). Prescriptive authority for psychologists: A consensus of support. *Professional psychology: Research and Practice*, *31(6)*, 604-609.

- Shahidullah, J. D., & Carlson, J. S. (2011). *The Prescription for Progress?*. Piscataway, New Jersey, US: APA Division 16, Division of School Psychology.
- Smith, B, L. (2012). Inappropriate prescribing. Monitor, 43 (6), 36.
- Tilus, M. R. (2008). Meeting the need: The grass roots emergence of the prescribing psychologist within the U. S. Public Health Service. Retrieved from http://apadivision55.intuitwebsites.com/Meeting the Need.pdf
- Thorne, M. (2009). *Transinstitutionalization and RxP*. Washington, District of Columbia, US: American Psychological Association (APA).
- Vector Research. (1996). Cost-effectiveness and feasibility of the DoD Psychopharmacology Demonstration Project: Final report. Arlington, VA: Author.
- Wagner, M.K. (2002). The high cost of prescription privileges. *Journal of Clinical Psychology*, *58*, 677–680.
- Wallis, N., & Wedding, D. (2004). The battle for the use of drugs for therapeutic purposes in optometry: Lessons for clinical psychology. *Professional Psychology: Research And Practice*, *35*(4), 323-328. doi:10.1037/0735-7028.35.4.323
- Walters, G. D. (2001). A meta-analysis of opinion data on the prescription privilege debate. *Canadian Psychology/PsychologieCanadienne*, 42(2), 119-125. doi:10.1037/h0086886
- Westra, H. A., Eastwood, J. D., Beverley, B. B., & Gerritsen, C. J. (2006). Psychology's pursuit of prescriptive authority: Would it meet the goals of Canadian health care reform? *Canadian psychology*, *47*(2), 77- 95.
- Wiggins, J. G., & Wedding, D. (2004). Prescribing, professional identity, and costs. *Professional Psychology: Research and Practice*, *35*(2), 148-150. doi:10.1037/0735-7028.35.2.148
- Witte, K., & Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health campaigns. *Health Education & Behavior*, 27, 591-615.
- Van Winkle, K. A. (2010). Prescription privileges for non-MDs. *Annals of the American Psychotherapy Association*, *13*(2), 62-64.

Author Note

Daniel Kaplin and Michael Dacunto, Department of Psychology, the College of Staten Island of the City University of New York (CUNY).

We would like to thank the New York State Psychological Association (NYSPA), NYSPA's Psychopharmacology Committee, and the students in the medical psychology laboratory who reviewed this manuscript.

Report from the Trenches: Survey of New Mexico Prescribing Psychologists' Outpatient Practice Characteristics and Impact on Mental Health Care Disparities in Calendar 2013

Christina E. Vento, PsyD, ABMP Private Practice at Fox Therapy Inc. Albuquerque, NM

Abstract

This article attempts to provide needed individual and composite data regarding the practice of New Mexican Prescribing Psychologists and their impact in reducing the mental health care disparities, particularly among low income and rural patients. Although the legislation authorizing prescriptive authority for psychologists trained in psychophamicologically became law in 2002, no known assessment of the parameters and practical impact of these practitioners' work has been conducted. Opponents of psychologists' prescriptive authority predicted that prescribing psychologists would cluster in the largest cities as do other mental health prescribers and make little impact on the unmet needs of low income and rural residents. However, this survey of individual prescribing psychologists suggests that this has not been the case. 62.5% of patients treated live in rural areas of the state and 90% of prescribing psychologists surveyed accept Medicaid payments. National estimates of psychiatrist participation in Medicaid range between 40-45%, among the lowest of any medical specialty.

Keywords: prescribing psychologists, rural, Medicaid

Introduction

In 2002, New Mexico became the first state to authorize psychologists to prescribe psychotropic medications in collaboration with the patient's primary care provider (PCP). This milestone came after a three year grassroots campaign inspired by the long wait times for many patients to see a mental health prescriber, which was particularly acute in rural areas and for patients covered with Medicaid or uninsured. Opponents of the bill predicted that prescribing psychologists would provide services primarily to urban and middle to upper income patients as other mental health prescribers have done. A 2013 national study of office based psychiatrists' acceptance rates for Medicaid and Medicare found that only 43.1% and 54.8%, respectively accepted those patients (Bishop, 2013).

Opponents also feared that the medical training psychologists received would be grossly inadequate to the task, resulting in numerous avoidable patient injuries or deaths. In New Mexico, in addition to completing a Master's degree or certificate program consisting of 450 hours of academic instruction, prospective prescribing psychologists must also complete two physician supervised practica with a total of 480 patient contact hours and pass the national Psychopharmacology Examination for Psychologists. The New Mexico Board of Psychologist Examiners has never received a complaint against prescribing psychologists alleging patient harm of any kind (New Mexico Board of Psychologist Examiners, personal communication 3/7/14).

Correspondence address: Christina Vento, PsyD, ABMP, Clinical and Prescribing Psychologist Fox Therapy Inc, 1001 Luna Circle NW, Albuquerque, NM 87102, 505-266-0388, cevento@earthlink.net

This study seeks to document how New Mexican Prescribing Psychologists are actually practicing and how that practice impacts access to mental health care. No study of this kind has been conducted to date so the actual practice patterns of working prescribing psychologists have been a matter of speculation.

Methods: A simple survey instrument was emailed to all prescribing psychologists on a list serve for licensed prescribing and conditional prescribing psychologists. They were also asked to forward the survey to any prescribing colleagues who might not be on the list serve. The survey asked for estimates descriptive of each psychologist's practice characteristics in 2013. When contact information was available, non-responders were contacted individually by phone or email to try to capture those who might have missed the list serve emails.

Subjects: A total of 36 psychologists became licensed to prescribe medications by the beginning of 2013. Of those, seven are currently practicing outside of the State of NM, in the US Public Health Service, the Indian Health Service, in Federal Medical Facilities (as civilian contractors) and in the United States Military. One practices exclusively in a forensic inpatient setting. Seven psychologists prescribing in NM in outpatient settings 2013 did not respond to the survey. 21 of 28 NM practicing outpatient prescribing and conditional prescribing psychologists returned the survey with estimates of their 2013 practice for a response rate of 75%.

Figure 1: Survey instrument sent to New Mexico prescribing psychologists

	# of individual Patients seen by you in 2013 to date	# Patient encounters in 2013 to date
Medicaid Patients		
Private Pay/Indigent		
Private Insurance		
Medicare Only		
Total # of Patients Treated		
% in Rural Location		
% in Urban Location*		

Figure 1 Caption

*Urban location = patients residing in the cities of Albuquerque, Las Cruces, Rio Rancho and Santa Fe. These are the only four cities in New Mexico with populations over 50,000 residents. Rural Location = patients living anywhere else in the State

Table 1:

Composite Results:	
Total Patients Treated	4329
Total Patient Visits	24567
Total Medicaid Patients Treated	2535
Total Medicaid Patient Visits	14380
Total Indigent Patients Treated	738
Total Indigent Patient Visits	4480
Total Private Insurance Patients Treated	872
Total Private Insurance Patients Visits	4454
Total Rural Patients Treated	2709
Total Rural Patient Visit	14443

Table 2:

Summary Statistics:	
Percentage of patients served living in rural communities	62.6
Percentage of patients seen who receive Medicaid benefits	58.6
Percentage of prescribing psychologists who see Medicaid patients	90.5
Total Medicaid + Indigent patients treated	3273
Total Medicaid + Indigent patient visits	18860
Mean number of Medicaid patients treated per prescribing psychologist	121

Conclusions

New Mexico psychologists with prescriptive authority, though still a small number of practitioners, are collectively making a significant impact on reducing mental health disparities among rural and low-income patients. More than 90% of prescribing psychologists surveyed accept Medicaid payments and 62.6 percent of patients served are living in rural areas with limited access to other behavioral health prescribers. This survey demonstrates that the grass roots efforts for psychologists' prescriptive authority highlighting the mental health disparity in rural and low income communities has been successful in getting trained prescribers to help serve those most in need.

Limitations of This Research

The major limitation of this research is its reliance on estimated values as opposed to counting actual patient records to arrive at the totals. There is no ready way to determine how accurate each practitioner's estimate of his or her practice actually is. Some practitioners with smaller practices were able to provide exact counts from their billing records but the majority provided estimates based on their typical weekly schedule extrapolated for the year. A major contributor to this is the lack of funding for electronic medical records systems for psychologists that is provided to other professions through the Hi-Tech Act, which pays up to 60,000 per medical practitioner per year to adopt a medical records system that is meaningfully used in patient care. Without an electronic system, practitioners have to manually review and count hundreds of patient records into the different categories, a very time and labor-intensive undertaking for busy practitioners.

Future Research

Future research should include more precise estimates of patient data and also a more comprehensive array of demographic information to better document the cultural, linguistic and age diversity of patients served. A national study of the impact of prescribing psychologists and consulting psychologists with psychopharmacological training is in the early stages of development at this time.

Reference

Bishop TF, Press MJ, Keyhani S & Pincus HA, Acceptance of Insurance by Psychiatrists and the Implications for Access to Mental Health Care. *JAMA Psychiatry*. 2014;71(2):176-181. doi:10.1001/jamapsychiatry.2013.2862.

Family Interventions in Lifestyle Medicine

Ward M. Lawson, PhD, ABPP, ABMP Tri-County Psychological Services, Inc. Marshfield, MO

Abstract

Couples and family therapy (CFT) is efficacious for improving interpersonal relationships and treating specific mental and behavioral problems. Due to the growing appreciation of the benefits of integrated health care, psychological interventions, including CFT, are being increasingly applied to behavioral health disorders, such as cardiovascular disease and diabetes. This is grounded in the stress and coping literature, which includes the emerging research on the psychobiology of intimate relationships. The CFT efficacy literature regarding behavioral health problems and disorders is reviewed. It is argued that successfully treating serious mental illness and/or behavioral health disorders requires an integrated, systemically-oriented, service delivery model. Assertive Community Treatment (ACT) is presented as an illustrative model. The importance of senior, doctoral-level supervision is also discussed. This patient population is vast, underserved, highly complex, and epitomizes the necessity and importance of embracing the biopsychosocial model. Medical psychologists are well-suited for positions of leadership within such treatment models. It is also argued that medical psychologists should develop proficiency in family therapy or refer to a board certified family psychologist when treating this population.

Efficacy of Family Therapy

Couples and family therapy is a broad and general orientation to the science and practice of professional psychology that is based on a systemic epistemology. Left understands human development, personality, and behavior within a systemic paradigm that recognizes the reciprocal interaction between individual, interpersonal, and environmental or macrosystemic factors over time. Reviews of the literature have produced strong evidence to conclude that couple and family interventions are efficacious for a range of clinical disorders. This growing body of process and outcome studies that meet the highest standards of research methodology has been called the emergence of family interventions science.

Family therapy models have effects substantial enough to suggest they should be the primary treatment options for child and youth behavior problems, substance use/abuse, eating disorders and the management of schizophrenia. Four family-based intervention models have significant research evidence from meta-analytic, qualitative, and individual clinical studies: 1. Functional Family Therapy for serious youth behavior, substance abuse, and relationship problems; 12-14 2. Multisystemic Therapy for serious youth antisocial behaviors; 3. Brief Structural Strategic Therapy for youth behavior and drug abuse problems, family psychoeducational approaches for schizophrenia treatment, and 4. Behavioral Family Systems Therapy for eating disorders. Family therapy has

Correspondence address: Ward M. Lawson, PhD, ABPP, ABMP, PO Box 256, Marshfield, MO 65706 OzarksCare@yahoo.com

been found to be superior to individual therapy for adolescents with anorexia nervosa.¹⁸ Couples therapy has been found to be efficacious for relationship satisfaction, alcohol and substance abuse, infidelity, intimate partner violence, and general mental health and depression.¹¹

Relationship dysfunction, stress, and behavioral health problems

We have known for a long time from research conducted on individuals that stress has physiological effects on the human body. The early work of Walter Cannon and his studies of the "fight or flight" response and the activation of the sympathetic-adrenal-medullary system, 19 and Hans Selye's work on hormonal responses of the hypothalamic-pituitary-adrenal axis, 20 demonstrated that prolonged or repeated activation of these systems is associated with immunological-suppression. Long-lasting immunological alterations are thought to have adverse consequences for physical and psychological health and well-being. However, it should be noted that not all researchers agree. 21

Stress researchers have expanded the scope of inquiry beyond laboratory studies of individuals to examining stress associated within social contexts. Interpersonal relationships are such a large part of the human experience and are ubiquitous. In population-based studies, most adults report at least one significant intimate relationship. For example, among persons aged 65 and older, only four percent report never having been married. ²² An additional portion of the adult-population is involved in same-gender relationships or other types of committed relationships, suggesting that almost all of us are part of a couple for some portion of our life.

Further, the incidence of chronic illness is high and increasing. It is estimated that by 2030, 150 million Americans will have a chronic illness, and although the likelihood of a chronic illness increases with age, most individuals with a chronic illness are under the age of 65.²³ Taken together, these statistics tell us that our relationships, or lack thereof, are likely to affect and be affected by illness.

There is growing evidence that the lack of an intimate relationship or being in a troubled relationship is associated with health problems. A review of six large, prospective studies that examined the relationship between health outcomes and the quality and quantity of social relationship provided evidence that mortality is higher among more socially isolated individuals. ²⁴ Reviews of the literature have revealed social isolation appears to be a major psychosocial risk factor for the development of cardiovascular disease. ²⁵

The associations between dyadic behavior in couples and psychophysiological functioning may be an important factor in understanding why partners in distressed relationships are more susceptible to disease. Regative dyadic interaction can be regarded as a significant stress that may directly result in acute physiological changes, i.e., endocrine, cardiovascular and immunological. Verall negativity as well as specific destructive interaction patterns (demand-withdraw, asymmetrical interaction pattern) are associated with stronger hormonal and cardiovascular reactivity and immunological down regulation.

A review of 40 studies on couples and illness and conclude the effect of relationship/marital variables on health are significant.²⁹ This identified three types or levels of couple variables that could have an impact on health variables: (a) relationship status (whether or not one is in a significant relation), (b) relationship quality (satisfied versus dissatisfied), and (c) couple interaction, as assessed by the observation of specific

behaviors. The authors proposed a model of the association between intimate relationship and health status, which include interpersonal, intra-individual, psychological and physiological variables.

The Adverse Childhood Experiences (ACE) Study is a large, ongoing research collaborative project between the Centers for Disease Control and Kaiser Permanente that examines this increasingly appreciated relationship between adversity in social contexts and mental and physical problems. Over 17,000 Kaiser patients undergoing routine health screenings volunteered for the study. The overall objective was to assess the impact of ACE on a variety of health behavior and outcomes, and health care use. This study revealed very powerfully how the short- and long-term outcomes of these childhood exposures is strongly associated with a multitude of health and social problems.³⁰

ACE was defined as childhood abuse (emotional, physical, sexual), parental separation or divorce, domestic violence, household substance abuse or mental illness, and incarcerated household members. These traumatic experiences are common, as nearly two-thirds of study participants reported at least one ACE, and more than one of five reported three or more ACE. The ACE Score was used to assess the total amount of stress during childhood. The study demonstrated that as the number of ACE increases, the risk for the following health problems increases in a strong and graded fashion: alcoholism and alcohol abuse, chronic obstructive pulmonary disease, depression, fetal death, illicit drug use, ischemic heart disease, liver disease, risk for intimate partner violence, multiple sexual partners, sexually transmitted diseases, smoking, suicide attempts, unintended pregnancies, early initiation of smoking, early initiation of sexual activity, and adolescent pregnancy. Thus, interpersonal dynamics and family functioning is highly influential in the developing child's behavioral choices, personality development, and long-term consequences manifesting as susceptibility to disease and various comorbidities.

It is noteworthy this list of health problems includes both psychological/behavioral and medical disorders. These disorders are often thought of as mutually exclusive with minimal thought given to potentially common etiological factors. Thus, it seems appropriate for health care providers, and the general public as well, to view family dysfunction and relationship stress as not only associated with psychological problems and high risk behavior, but a variety medical disorders as well. This necessitates the adoption a systemic epistemology with regard to prevention and treatment. Modern healthcare delivery systems are integrative. Adherence to the biopsychosocial model of human functioning requires a comprehensive approach to health care, intervening with the three spheres.³¹

Intervention

There is a growing trend to apply CFT to families with members who have behavioral health disorders. ^{32, 11} The application of CFT to high cost disorders has the potential to have a significant impact on individuals, their family, and national health care cost reduction. In terms of health care expenditures, five conditions (cardiac disease, respiratory disorders, cancer, metabolic disorders, and mental disorders) ranked as the most costly between 1996 and 2006. During this period, the expenditures for mental disorders, excluding nursing care and hospitalizations, rose from \$35.2 billion in 1996 (in 2006 dollars) to \$57.5 billion in 2006.³³ In 2006, the cost of treating chronic respiratory disease was \$176.8.³³ According to the American Heart Association, treating cardiac

related disorders and disease in 2009 cost \$183 billion dollars.³⁴ About \$92 billion dollars per year, or four percent of health care dollars are spent on the overall direct costs related to diabetes. The Centers for Disease Control and Prevention predicts that spending on diabetes care will reach \$192 billion in 2020 ³⁵

As opposed to narrow, costly medications-only approaches, these conditions can be effectively treated with behavioral interventions, such as diet, exercise, and stress management, which include modifying family structure and dynamics to reduce family problems, etc., at sizable savings and with relatively few, if any, side effects. With the combination of appropriate lifestyle medical care and behavioral interventions these patients experience better health while reducing overall health care costs. ³⁶

Assertive Community Treatment. ACT is an example of highly systems-oriented treatment program that is applicable to mental and behavioral health problems. It evolved from the de-institutionalization movement in the 70's to address the serious gaps that soon became obvious, as seriously mentally ill patients were turned out into the community with few resources. It is an intensive and highly integrated approach for community mental health service delivery. ACT programs serve severely mentally ill outpatients whose persistent symptoms and difficulties in living independently result in continuously high need services. ACT addresses serious functioning difficulties in several major areas of life, often including work, social relationships, residential independence, money management, and physical health and wellness. 37

More than simple case management, ACT is a service delivery model with the primary goal being recovery through community treatment and rehabilitation. A flexible team approach is used, focusing on a small, shared caseload, using in-vivo, time-unlimited services. The team remains available for support whenever it is needed. Crisis management is available 24 hours a day, seven days a week. The ACT approach assumes responsibilities for all services. The team consists of psychologists, psychiatrists, nursing, social work, rehabilitation, substance abuse treatment, and employment counseling. Rather than working with patients in an office or hospital, ACT team members work with patients in their homes, neighborhoods, and other places where their problems and stresses arise and where they need support and skills. ACT team members with different types of expertise contact patients as often as necessary. Patients are never discharged from ACT programs because they are "non-compliant". Rather, it is assumed that the team has not effectively defined the problem. Team members work closely with patients to develop plans to help them reach their goals and progress is assessed daily. If patient's needs change or a plan isn't working, the team responds immediately.

Comprehensive intervention occurs on two levels. First, provide emotional and instrumental support to meet basic needs, addressing activities of daily living, housing, family life, education and employment, managing finances, and access to quality health care. Secondly, address problematic psychosocial issues beginning with accurate diagnosis and applying standard family systems therapy focused on breaking down enmeshment, encapsulation, fusion and undifferentiated family ego mass and impermeable boundaries. These tend to be isolated, withdrawn, and contemptuous/paranoid family systems that have hostility and rejection of the world and impede child individuation. This results in acting out, underachievement, association with negative peers, addictions, nervous breakdowns, suicidal behavior and psychotic breaks.

CFT and associated therapies supports and fosters differentiation, identification with extra-familial identity objects (coaches, teachers, church youth pastors and leaders, recreational and hobby supervisors such as scouting, sports, exercise and fitness programs, etc.) and positive institution and positive activities for a healthier lifestyle overall, including diet, exercise, exposure to sunlight, and restorative sleep. Supplemental individual therapy is also utilized to exploit long-term potentiation and the neuroplasticity of the brain to develop of functional cell assemblies that promote healthy skill sets. This can be accomplished through mindfulness training, anger management, communication skills, etc). Again, ACT is time unlimited, as it takes a long time to grow new nerve cells and for apoptosis to occur with over learned, destructive behavior patterns.

Supervision. The functionality of any system is linked to the effectiveness of the executive subsystem. Supervision is a key component of successful implementation of comprehensive programs such as ACT. Supervision is essential to monitor adherence to the treatment model and to achieve positive, sustainable outcomes. However, since ACT is less explicit in the supervision component, integration of the supervision concepts from Multisystemic Therapy (MST) is encouraged. Briefly, MST also is a highly validated, manualized family and community-based treatment program designed for adolescent antisocial behavior and those at imminent risk of out-of-home placement. Risk factors are targeted through individualized interventions. The interventions integrate empirically-based clinical techniques into a broad-based ecological framework that addresses relevant factors across family, peer, school, and community contexts. Interventions focus on promoting behavioral changes in the youth's natural ecology by empowering caregivers with relevant skills and resources.

As noted above, MST is explicit about supervision, which is provided by doctoral level providers with clinical competence in family therapy, behavior therapy, and child development. As with ACT, a full-time program supervisor, or "team leader," provides direct services at least 50% of the time. Conducted weekly in a small group format for approx two hours, but predicated on doing whatever it takes to achieve favorable patient outcomes. Supervisors, like clinicians, are available 24 hours a day, seven days a week. As in treatment, the objectives of additional supervisory meetings are clearly identified, as are the effective means of meeting those objectives. When families fail to improve, the clinician and the treatment team do not blame the family, but do identify those individual factors (e.g., parenting deficits, parental fear, or inadequate social support), systemic factors (e.g., few employment, educational, or positive leisure time opportunities), and treatment-related factors (e.g., intervention was ineffective or was implemented without sufficient practice) that thwart attainment of the family's treatment goals.

All clinicians require ongoing supervision because of the natural tendency to drift toward interventions that are over-learned, easy to implement, or emotionally satisfying (i.e., facilitating a patient's dependency). Clinicians provide case summaries prior to supervision detailing clear, overarching goals, previous intermediary goals (i.e., weekly steps toward achieving larger goals), and barriers and advances encountered since the last supervision. Supervisors review case summaries prior to supervision, and prioritize the cases based on acuity that need special attention and determine if the analysis is logical and multidimensional (includes all pertinent factors across systems contributing to barriers or advances).

Conclusion

Medical psychologists are among the most highly trained healthcare professionals, and are poised to function as team leaders, alongside physicians, in hospitals, primary care centers, nursing homes and mental health centers. As the landscape of healthcare continues its evolution into an integrated care delivery system, ACT and other similar evidence-based, systems therapies will become increasingly relevant and utilized. Medical psychologists will need to become well-versed in these systems-based models of care.

The medical psychologist of the future will be operating from a senior position much like the team leader of an ACT-designed program. This supervisory and leadership role, sometimes referred to as "case management," is a vital function of treatment in multidisciplinary teams. Integrative, multi-disciplinary service delivery has become the recommended approach for complex, high dollar risk disorders, i.e., severe and persistent mental illness, coronary heart disease, hypertension, diabetes, obesity, substance use, etc) and medical psychologists are invaluable senior members. Tasks for the medical psychologist include psychological evaluations, ordering various modalities of therapy and psychoeducation, ordering labs, writing behavioral scripts, and prescribing psychotropics if appropriate. Other tasks may include referring for ancillary services (e.g., dietary, occupational therapy, exercise programs), and ensuring the patient's family members have relevant assessments and care. Coordination of care by medical psychologists and physicians for these complex cases is a central component of the Affordable Care Act. 38 While state and federal government health insurance plans have heretofore been insufficient to address the nation's complex health care needs, the passage of the Affordable Care Act should prove to be the most exciting, beneficial, and cost-effective transfigurations for healthcare in the U.S to date.

References

- 1. Nutt, R.L., & Stanton, M. (2008). Family psychology specialty practice. *Professional Psychology: Research and Practice*, *39*, 519-528.
- 2. Stanton, M. (2009b). The systemic epistemology of family psychology. In J. H. Bray & M.Stanton (Eds.), *The Wiley-Blackwell handbook of family psychology* (pp. 5-20). Oxford, UK: Wiley-Blackwell.
- 3. Liddle, H. A., Santisteban, D. A., Levant, R. F., & Bray, J. (Eds.). (2002). *Family psychology intervention science: An emerging area of science and practice.*Washington, DC: American Psychological Association.
- 4. Gurman, A. S. (1971). Group marital therapy: Clinical and empirical implications for outcome research. *International Journal of Psychotherapy, 21*, 174-189.
- 5. Gurman, A. S. (1973). The effect of effectiveness of marital therapy: A review of outcome research. *Family Process*, *12*, 45-54.
- 6. Gurman, A. S. (1975). Couple's facilitative communication skill as a dimension of marital therapy outcome. *Journal of Marriage and Family Counseling*, 1, 163-174.
- 7. Gurman, A. S., & Knishern, D. P. (Eds.). (1981). *Handbook of family therapy*. New York, NY: Brunner/Mazel.
- 8. Gurman, A. S., & Kniskern, D. P. (Eds.). (1991). *Handbook of family therapy*. New York, NY: Brunner/Mazel.
- 9. Gurman, A. S., & Kniskern, D. P., & Pinsof, W. M. (1986). Process and outcome research in family and marital therapy. In A. Bergin & S. Garfield (Eds.). *The handbook of psychotherapy and behavior change* (Vol. 3, pp. 550-649). New York, NY: Wiley.

10. Pinsof, W. M., & Wynne, L. C. (1995). The efficacy of marital and family therapy: An empirical overview, conclusions, and recommendations. *Journal of Marital and Family Therapy*, *21*(4), 585-613. doi:10.1111/j.1752-0606.1995.tb00179.x.

- 11. Sexton, T. L., Datchi, C., Evans, L., LaFollette, J., & Wright, L. (2012). The effectiveness of couple and family-based clinical intervention. In Lambert (Ed.): *Handbook of Psychotherapy and Behavior Change* (pp. 587-639). New York, NY: Wiley.
- 12. Sexton, T. L., & Alexander, J. F. (2003). Functional family therapy: A mature clinical model for working with at-risk adolescents and their families. In T. L. Sexton, G. R. Weeks, & M. S. Robbins (Eds.), *Handbook of family therapy* (pp. 371-400). New York, NY: Brunner-Routledge.
- 13. Alexander, J. F., Pugh, C., Parsons, B., & Sexton, T. L. (2000). Functional family therapy. In D. Elliot (Series Ed.), *Blueprints for violence prevention* (2nd ed.). Golden, CO: Venture.
- 14. Sexton, T. L., & Turner, C. T. (2010). The effectiveness of functional family therapy for youth with behavior problems in a community practice setting. *Journal of Family Psychology*, *24*(3), 339-348.
- 15. Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of antisocial behavior in children and adolescents*. New York, NY: Guilford Press
- 16. Szapocznik, J., Robbins, M. S., Mitrani, V. B., Santisteban, D. A., Hervis, O., & Williams, R. A. (2002). Brief strategic family therapy with behavior problem Hispanic youth. In J. Lebow (Ed.), Integrative and eclectic psychotherapies, Vol. 4 in F. W. Kaslow (Ed.), Comprehensive handbook of psychotherapy (pp. 83-109). Hoboken, NJ: Wiley.
- 17. Robin, A. L. (2003). Behavioral family systems therapy for adolescents with anorexia nervosa. In A. E. Kazdin & J. R. Weisz (Eds.). Evidence-based psychotherapies for children and adolescents (pp. 358-373). New York, NY: Guildford Press.
- 18. Lock, J., Grange, D. L., Agras, W. S., Moye, A., Bryson, S. W., & Booil, J. (2010). Randomized clinical trial comparing family-based treatment with adolescent-focused individual therapy for adolescents with anorexia nervosa. *Archives of General Psychiatry*, *67* (10), 25-32.
- 19. Cannon, W. B. (1932). The wisdom of the body. New York: Norton.
- 20. Selye, H. (1974). Stress without distress. Philadelphia: Lippincott.
- Manuck, S. B., Marsland, A.L., Marsland, M.A., Kaplan, J.R., & Williams, J.K. (1995). The pathogenicity of behavior and its neuroendocrine mediation: An example from coronary artery disease. *Psychosomatic Medicine* 57, 275–283.
- 22. U.S. Bureau of the Census. (1998). *PPL-100Marital status and living arrangements; March 1998 [Update]*.
- 23. Hoffman, C., Rice., D., & Sung, H. Y. (1996). Persons with chronic conditions: Their prevalence and costs. *Journal of the American Medical Association*, *276*, 1473-1479.
- 24. House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*. 24. 540-545.
- 25. Krantz, D. S., Contrada, R. J., Hill, R. O., & Friedler, E. (1988). Environmental stress and biobehavioral antecedents of coronary heart disease. *Journal of Consulting and Clinical Psychology*, *56*, 333-341.
- 26. Glenn, N. D., & Weaver, C. N. (1981). The contribution of marital happiness to global happiness. *Journal of Marriage and the Family, 43,* 161-168.

27. Weissman, M. M. (1987). Advances in psychiatric epidemiology: Rates and risks for major depression. *American Journal of Public Health*, 77, 445-451.

- 28. Groth, T., Fehm-Wolfsdorf, G., Hahlweg, K. (2000). Basic research on the psychobiology of intimate relationships. In K. B. Schmaling & T. Goldman Sher (Eds.). *The psychology of couples and illness: Theory, research and practice* (pp. 13-42). Washington, DC: American Psychological Association.
- 29. Burman, B., & Margolin, G. (1992). Analysis of the association between marital relationship and health problems: An international perspective. *Psychological Bulletin*, *112*, 39-63.
- 30. Felitti, V. J., Anda, R. F., & Nordenberg, D. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, *14*, 245-258.
- 31. Engle, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, *196*, 129-136.
- 32. Schmaling, K. B., and Sher, T. G. (Eds.) (2000). *The Psychology of Couples and Illness: Theory, Research & Practice*. American Psychological Association: Washington, DC.
- 33. Soni, A. (2009). The Five Most Costly Conditions, 1996 and 2006: Estimates for the U.S. Civilian Noninstitutionalized Population. Statistical Brief #248. July 2009. Agency for Healthcare Research and Quality, Rockville, MD.
- 34. The Hasting Center. Cost Trends in Heart Disease, End Stage Renal Disease, Cancer, and Metabolic Syndrome. May 22, 2009.
- 35. The Hastings Center. The projected cost of chronic disease. January, 2010.
- 36. Golubic, M. (2011). Comparative Efficacy of Lifestyle Practices for Certain Chronic Conditions, Comparison of Medications with Lifestyle Medicine. ACPM conference Feb 17, 2011.
- **37.** U. S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (2013). *Assertive Community Treatment: An evidenced-based practice*. www.samhsa.gov.

Writing Psychological Prescriptions for Behavioral Healthcare

Jack G. Wiggins, PhD

Abstract

Psychological prescriptions for behavioral health care are a means of integrating mental and physical healthcare. Guidelines for prescribing behavioral treatments are presented that follow the U.S. Drug Enforcement Agency Guidelines for prescribing medications. The DEA Guidelines requires that prescriptions for medication must be in written format with a valid signature of the healthcare provider. A treatment recommendation given orally by treating licensed psychologists could meet the DEA standard for a valid prescription when presented in written form with an authorized signature. Research has shown that psychotherapy and psychopharmacology are first-line treatments that are equivalent in effectiveness and when used together often provide an added benefit. Written psychological prescriptions for behavioral treatments have the potential of increasing the effectiveness of outcomes of mental aspects in healthcare. Current Procedure Terminology V codes, for the first time, include code 90863 for psychologists to bill for prescriptions associated with psychotherapy.

Introduction

The Patient Protection and Affordable Care Act has created unforeseen opportunities for the use of Psychological Prescriptions for behavioral healthcare in the integrated health care model. In order for medical psychologists to participate fully in the future of healthcare delivery they must follow existing standards, guidelines and templates to facilitate the integration of psychological procedures into the diagnosis, treatment and restoration of functionality of patients needing and seeking healthcare. Federal and State laws authorize licensed psychologists to diagnose, treat and rehabilitate patients with mental disorders, as well as, treat psychological effects as a consequence of disease and physical disorders.

Integrating Psychological Treatments into Healthcare

Psychologists' treatment recommendations are widely used and accepted by other healthcare providers. However, behavioral treatment recommendations are often viewed differently from treatment recommendations for using medications. Regulation of drug recommendations for medications is by the U.S. Drug Enforcement Agency, whereas, behavioral treatment recommendations are not. This differentiation between behavioral treatments and medication treatments has been a major stumbling block in the treatment of mental disorders. This unnecessary distinction between psychological and drug therapy has been detrimental to health and welfare of 20% or more of the United States population that have been diagnosed with a mental disorder or classified as mentally disabled.

The Food and Drug Act was signed into law in 1906 and was the stimulus for the Flexner Report of 1910 that resulted in the medical/industrial revolution of the 20th century.² The

Correspondence address: Jack G. Wiggins, PhD, retired. Former President of American Psychological Association and Editor Emeritus of the Archives of Medical Psychology 15817 E. Echo Hill Dr., Fountain Hills, AZ 85268, Email: drjackwiggins@cox.net

US Bureau of Chemistry established by the Food and Drug Act was reorganized and became the Food and Drug Administration in 1927. The DEA was created in 1973 to control drug trafficking and was assigned to the Department of Justice for regulation. *Treatment recommendations involving the use of drugs* now require written prescriptions to dispense controlled substances legally. (See Appendix A and B) Pharmacists were authorized to prepare, compound and dispense medications authorized by doctors in the industrial revolution of medicine of the 20th century. Traditional treatment procedures for healing were codified in State laws under State authority granted by the US Constitution. Medical and other healthcare procedures require diagnosis and treatment to be provided by licensed healthcare professionals, including psychologists, under the authority of State or Territorial law.

The Medicare Law established the Center for Medicare and Medicaid (CMS) to oversee the reimbursement of medical services Medicare and Medicaid beneficiaries. CMS licensed the American Medical Association (AMA) to develop precise procedure codes (CPT) to avoid confusion in implementing doctors' treatment orders.³ These Current Procedure Terminology codes are copyrighted by the AMA and are continuously revised as healthcare techniques are updated as new procedures are developed. Dr. Antonio Puente, was elected in 2008, as the first and only psychologist to serve as a representative to the CPT Board. He serves on a prestigious 17-member panel of the 121-member CPT Board. Psychology codes include the Health and Behavior Codes and the new 90863 Code for psychologists to bill for prescribing medications associated with psychotherapy.

A 31 member Relative Values Committee (RUC) for reimbursing physicians' services is comprised of the AMA, the American Osteopathic Medical Association, 21 medical specialty societies. CPT Board has 6 seats on the joint CMS Relative Values Committee (RUC) that meets once annually. The American Psychological Association (APA) is without vote on the Relative Values Committee but sends a delegate to the RUC. In sum, the CMS, the CPT and the RUC control 20% of the gross national product related to health care.³ Medicare Law needs to be revised to include psychologists as "Physicians" in order to expect representation to the RUC.

The foregoing brief history of the development of the health care system that is still evolving, demonstrates both its complexity and its glaring omissions of psychological healthcare. Written directions to document dispensing of medications of the treating doctors' orders have been required the past century. In sharp contrast, behavioral care that is an integral part of treatment and healing procedures has <u>not</u> required a written order. Thus, behavioral treatments as a vital portion of healthcare have gone "under the radar" and making their value "invisible."

Cryptic notations on a written prescription may have little meaning for the patient regarding directions for use of the medication. Treating healthcare providers rely on pharmaceutical companies' patient education "handouts" that are included in a dispensed medication to provide more detailed for use of the drug they have prescribed. However, patient information "handouts" are often painfully short in useful information for concomitant behavioral care. Therefore, it is proposed to make Psychological Prescription recommendations a visible part of health care. Written Psychological Prescriptions are an integral part of treatment recommendations for the patient that could be instrumental in developing CPT codes and being assigned Relative Values for reimbursement.

Prescriptions for Patient Instruction

Writing a psychological or behavioral prescription for a health condition that has mental symptoms, as sequelae, may seem an unnecessary time wasting procedure for busy, time pressured healthcare providers. Therefore, justification for suggesting writing a behavioral recommendation in a prescription must be based on sound evidence of its added value to improving healthcare outcomes. Some of the purposes of this paper are to begin the process of writing psychological prescriptions for the benefit of the patient, improving healthcare outcomes and reducing costs of care. Writing Psychological Prescriptions will first address behavioral prescriptions of mental conditions where there is obvious need. Psychological Prescriptions for the behavioral aspects of other than mental health conditions that are suitable for CPT coding and reimbursement will follow.

Writing a behavioral prescription should be an integral part of modern psychotherapy although it breaks from its historical beginnings in psychoanalytic practices for treating mental conditions. "Client centered" psychological therapy of Carl Rogers was described as "non-directive" care and stirred controversy. Professional arguments over the curative effects of "non-directive therapy" became the springboard for the development of evidence-based psychological treatments used today. Vestiges of this history remain when treating doctors of psychology do not give the patient "written" directions to follow except when to return for the next appointment. Clinical or medical psychologists provide references to reading materials and give oral directions to their patients. It is now time to develop protocols for providing effective Psychological Prescriptions that patients can understand and will carry out.

Defining Psychological Prescriptions is the first step in integrating behavioral health into the healthcare system. The Webster's II New College Dictionary lists several uses of the term "prescription" for rules and regulations.⁵ A prescription is defined in two ways even when it is restricted to its use in healthcare:

- 1. "A physician's written instruction for preparation and administration of a medication."
- 2. "To recommend or order a drug, remedy or treatment."

It is clear from this brief description of a prescription that "prescribing" has become wedded to medicine and drugs over time. Yet, this limited use of the term "prescription" does not use modern term of *health practitioner* that includes psychologists, instead of physician. To prevent confusion, it is necessary to define a psychological prescription precisely to distinguish it from a prescription for medication for the treatment of health conditions. The implicit use of Psychological Prescriptions to treat intrinsic behavioral aspects health conditions is associated with <u>both</u> mental and physiological health and must be made explicit in healthcare law.

The history of psychology as a profession and its practice in State and federal law has been intimately associated with improvement of health and human functioning. For the last century psychology has established itself as a separate health profession that often collaborates with medicine. Thus, it is not unexpected that psychological and medical doctors frequently collaborate when medications alone do not result in the patient's restoration to health and behavioral healthcare treatments are required. Rehabilitation psychology served as a model for clinical and medical psychology to become integrated into healthcare and regulated in laws regarding the mentally ill and/or psychologically disabled.

Use of Medications in Psychological Treatments

The use of psychotropic medications for treatment of mental conditions and the licensing of clinical psychologists occurred simultaneously in the last half of the 20th century. The shortage of trained psychiatrists was mitigated by the use of clinical psychologists to provide mental treatment and collaborate in the management of health care of patients taking prescribed psychotropic drugs. The psychiatric shortage caused pharmaceutical companies to seek larger markets for their psychotropic medications. They began touting their psychotropic products as safe for primary care physicians, lacking specialty training in mental disorders, to prescribe. "Big pharma" promoted new healthcare laws of the 1990's to advertise directly to the public to obtain their medications from primary care physicians and without recommendation from a specialist.

Psychiatry has been marginalized in healthcare by lower fees for their services due to the success of advertising of prescribing psychotropic medications by general practitioners. Medicine has been unable recruit needed mental enough health providers (even with bonus pay and lowered training standards) due to the chronic shortage of psychiatrists worldwide that has existed for the past 50 years and still remains. Psychiatry has had to use special J-1 waivers from the Health Services Resource Agency to recruit 44% of its trainees from foreign medical personnel. Yet, many of its allocated and funded psychiatric residency slots remain unfilled each year. Furthermore, psychiatrists trained with federal funds have the lowest participation rate of any medical specialty, (54%) in Medicare and (44%) in federal/state funded Medicaid programs. 8

Physicians lacking specialized training or interest in treating mental disorders turned to clinical psychologists to treat their patients with mental disorders and manage patients taking medications they prescribed. Medication management fell to clinical psychologists who became specialized as medical psychologists. They learned psychopharmacology through practice experience and specialty training. Medical psychologists sought and gained authority in New Mexico, Louisiana and Guam to prescribe and modify psychotropic medication regimens as patients improve and require reduced dosages of medications for their recovery. Medical psychologists have used the necessity to reduce medications for successful treatment of patients under their care as one of the several rationales for seeking prescriptive authority.

Definition of a Psychological Prescription

The Institute of Medicine reviewing the past 50 years of experience and research about the use of psychotropic medications in treating mental conditions reports that medications alone are of limited utility. Behavioral treatments have been demonstrated to be an effective first line treatment and provide equal outcomes to psychotropic medications. The IOM also recognized protocols combining psychotherapy and medications may result in greater benefits than either drugs or psychotherapy alone. These findings provide a basis developing a protocol for the use of psychological prescriptions in practice. The following definition of a Psychological Prescription for Behavioral Healthcare is offered:

A Psychological Prescription for Behavioral Healthcare (PPBH) is defined as a written document by a licensed psychologist for their patients for the administration and implementation of behavioral health procedures to increase human functioning and sense of well-being and to eliminate health disorders, diseases, illnesses, or symptoms of these conditions or to reduce disabilities or the effects of handicapping conditions.

Advantages of this definition of a Psychological Prescription for Behavioral Healthcare

- Psychological Prescriptions for Behavioral Healthcare (PPBH) written by medical psychologists are independent of and separated from the stigmatizing effects of prescribing for psychiatric diagnostic labels. Psychiatric labeling of behavior considered normal by the public is being challenged by the government but is still in use by managed care companies and biologically oriented professionals.
- PPBH procedures focus on and address the perceived needs of the patient and provide measures of the effects of the care provided. PPBH prescriptions are nonstigmatizing, identify prompt improvements of effective treatments and result in lower relapse rates.
- This definition of Psychological Prescriptions explicitly focuses on its purposes for behavioral healthcare. It is broadly written and can include prescriptions of psychotropic medications used for treatment of behavioral conditions where authorized by law.
- 4. PPBH is designed to meet State and federal requirements for the delivery of behavioral health services by licensed psychologists.
- 5. This definition integrates prescriptions written by psychologists at parity with those of other healthcare providers.
- 6. PPBN provides documentation for the measurement of behavioral change and treatment efficacy.
- 7. PPBH permits psychological prescriptions to be used for supervising and regulating the practice of behavioral healthcare.
- 8. Psychological prescriptions can also serve as a rational basis for the reimbursement of psychological services without stigmatizing the patient with a diagnostic label.
- Psychological prescriptions can be conveniently included in a patient's health record when transfer of information among health professionals as required for continuity of care of the patient.

Purposes of Psychological Prescriptions

Psychological prescriptions are written for restoring functionality and a sense of well being of the patient rather than relying solely on reduction of mental symptoms to provide relief. Use of PPBH for prescribing psychotropic medications, changing medications or reducing medications in regimen of treatment may seem controversial to some at first. People often think only of prescribing a drug for a given purpose or condition as prescriptive authority. However, in practice, the use of a single medication for a limited time for the treatment of mental disorders, such anxiety, depression, panic, compulsions or schizophrenia, is a rarity rather than a routine.

Current and proposed psychiatric diagnostic labels refer to clusters of behavior that are not unique concise entities. Thus, these clusters of dysfunctional behaviors may overlap diagnostic labels and result in using a combination of procedures and/or medications for the treatment of a patient with a mental condition. Mental treatment by medication is not and exact science and dependent upon drugs that are only partially successful eliminating symptoms. ¹¹ During the course of treatment use multiple medications creates a significant chance of adverse effects due to conflicting medications. *Changing medications, modifying dosages and reducing medications to improve patient's behavioral efficacy in daily living is part of managing mental disorders with which psychologists routinely deal.*

When responsibility of patient care is divided between two or more practitioners the problem of coordinating healthcare becomes complicated. This especially true in the treatment of mental conditions where one practitioner provides medications and another provides behavioral interventions for the same condition. Currently primary care physicians are writing 70% of the medication prescriptions for mental disorders while psychologists are providing the bulk medication management that patients receive after being diagnosed as having a mental condition. This is referred to as "the broken mental health system" because the practitioners with the least amount of mental health training prescribe the greatest amount of medications used. Too often primary care physicians make patients with mental issues second class because they are "too busy" with patients with other health conditions to do the necessary follow-ups of mental problems to evaluate the effectiveness of the psychotropic medications they have prescribed. Medicine has been unable recruit needed mental enough health providers (even with bonus pay and lowered training standards) due to the chronic shortage of psychiatrists worldwide that has existed for the past 50 years and still remains.

Licensed psychologists, on the other hand, who have the greatest amount of training in mental health care have a limited scope of treatment authority to provide the necessary behavioral care services in which they are especially skilled. Psychologists have gained prescriptive authority for psychotropic medications in two States and one Territory but have not obtained grants or funds to develop enough training programs to meet public needs. A large percentage of the US population does not have access to the mental health care they need. It is believed writing Psychological Prescriptions will enable psychologists to provide a full range of evidence-based care necessary to meet public needs for behavioral care.

The number of behavioral health prescriptions written is expected to rise dramatically since obesity was declared a disease by the American Medical Association. Declaring obesity a medical diagnosis does not resolve obesity treatment as a health issue. Scientific evidence shows obesity is a behavioral condition that is typically without a biological-basis. Medical prescriptions dealing with obesity have the un-intended consequence of being largely for behavioral disorders. This constitutes a challenge to psychologists to accurately define psychological procedures and demonstrate their effectiveness of behavioral treatments that are reimbursable as are prescriptions written as medical orders. Licensed psychologists can meet this healthcare challenge by writing Psychological Prescription for behavioral healthcare. Writing Psychological Prescriptions for behavioral healthcare can also facilitate the integration of psychological and medical healthcare by focusing on behavioral health procedures rather than diagnostic labels that have not been scientifically validated. Improved early access to effective behavioral treatments through the use of licensed psychologists minimizes the economic

handicapping of stigma from psychiatric diagnoses. Failure to secure prompt care due to treatment avoidance from the stigma of mental diagnoses tends to create chronicity in mental health conditions that are more costly to treat.

The Changing Mental Health System

The current diagnostic systems for mental health and codes for reimbursement are ripe for innovation in the health care system. The Center for Medicare and Medicaid has shifted away from the current use of a proprietary Diagnostic and Statistical Manual IV by developing codes that coincide more closely with the World Health Organization's International Classification of Disease-10 CM. Dr. Thomas Insel, Director of the National Institute of Mental Health has roundly condemned the DSM system as lacking validity and consisting of labels with a list of behavioral symptoms attached.¹²

Mental health care has been in a state of radical change since the enactment of Employee Retirement Income Security Act (ERISA) in 1974. ERISA abolished State mandated mental health insurance benefits in healthcare contracts. It allowed mental benefits to be regulated by private psychiatric corporations as a cost-saving measure *but* ERISA *did not set standards for quality of care*. Managed care companies used this omission in quality of care standards in the ERISA Law to create restrictive regulations that curtailed effective mental treatments using behavioral care by specialists. Instead, insurers substituted treatments for mental care by using psychotropic drugs as cost-saving measures that could be prescribed and managed by primary care physicians.

Pharmaceutical companies profited greatly from ERISA by creating new drugs to provide medical treatment for every mental condition listed in Diagnostic and Statistical Manual IV-TR of 1990. Pharmaceutical companies then lobbied and won federal authority advertise medications in television, radio and print media. This created an explosion in the use of psychotropic medication for the past 2 decades for untreated mental conditions of the public.

Publication of DSM 5 in 2013 has complicated this complex diagnosis/medication circus further. DSM 5 has expanded from 106 diagnoses of DSM IV and now includes over 200 new diagnostic categories that add confusion to behavioral diagnosis and treatment. This adds even more demands on overburdened primary care physicians who must now learn the new DSM 5 system in addition to learning the mental health requirements of the Affordable Act. Diagnostic classification of mental disorders using the DSM system lacks a scientific basis for determining treatment procedures or predicting treatment outcomes. Thomas Insel, Director of the National Institute of Mental Health states, "The strength of each of the editions of DSM has been its reliability. The weakness is its lack of validity."

A major paradigm shift in the treatment of mental conditions is necessary to reimburse behavioral health procedures for improving behavioral care quality and document its benefits in evidence-based treatment outcomes. Government mental health regulations that focus on psychiatric diagnosis and reduction of symptoms actually stigmatize the patients health care professionals are trying to treat, thereby making the mentally ill the social lepers of modern society. Social isolation of the mentally ill by creating costly custodial mental hospitals was not a cure anymore than leper colonies of the past were a treatment for leprosy. Modern medical treatments reduced the scourge of leprosy and

tuberculosis. Modern behavioral treatment procedures can enhance and restore functionality of patients in need of mental care must be used since use of medication alone has not been the answer after 50 years of trial.

The current model of healthcare that still reimburses delivery of mental health services to patients based on their psychiatric diagnoses rather than services rendered is subject gross financial manipulations by insurers. Managed care companies have limited the quality and quantity of mental care for the corporate benefit of themselves. Patients stigmatized with psychiatric labels avoid needed behavioral healthcare. "Treatment avoidance" is an uncalculated economic bonanza for insurers at the expense of the health of an untreated public. Failure to provide needed behavioral treatments lowers employee work performance, increases cost of employee sickness benefits and work related disabilities, thus inflating the cost healthcare to businesses and the government alike.⁹

Present practices in clinical psychology focus on individually tailored psychotherapy to increase human effectiveness. Diagnostic labels of mental disorders and measurement of symptomatic behavior reduction are de-emphasized by practicing psychologists. Using psychiatric labels and symptom reduction for reimbursement of services has created a market for "managed care" companies to reimburse psychoeducational procedures performed by master degree providers as "evidenced-based" treatments for diagnostic mental health categories. These psycho-educational interventions have not yet been proven to be effective in improving mental healthcare outcomes, yet are claimed to be less costly. Use of such "managed care" company schemes has reduced the use of highly effective psychotherapy protocols and resulted in insurers reducing the reimbursement rates of treatments provided by specialists for their own profit.

Medical psychologists writing psychological prescriptions produce documented evidence-based behavioral treatments. Primary care physicians accept and use prescriptions written by medical psychologists for behavioral healthcare in diagnosing and treating dysfunctional behaviors of patients. The Department of Defense created a Behavioral Health Optimizing Program (BHOP) that embeds medical psychologists into primary care physician (PCP) panels to provide online behavioral health consultation. This has been well received by PCPs and early reports indicate that early behavioral interventions are effective and can save costs of ineffective and duplicative treatments.

The DEA regulations that require written prescriptions for controlled substances and can be a model for psychological interventions. Writing Psychological Prescriptions for behavioral healthcare (PPBH) is a parallel process to writing DEA prescriptions for controlled substances. Thus, the PPBH process offers psychologists an easy and seamless transition from writing psychological prescriptions of behavioral care into writing medication prescriptions. Primary care doctors are familiar with behavioral prescriptions of psychologists. PPBHs can familiarize physicians with procedures written by licensed psychologists. PPBHs must be written in plain language (without using technical psychological terms) in order to make it easy for the patient and for the referring primary care doctors to understand the behavioral treatment plan. PPBH can facilitate a team effort in behavioral healthcare to improve treatment outcomes.

Guidelines for Writing Psychological Prescriptions

The Food and Drug Administration was created to establish and monitor the safety of the food supply and use of drugs in the United States. The Drug Enforcement Agency (DEA) is assigned to the Department of Justice regulate the prescribing of controlled substances such as medications. The DEA requires six elements to be a valid prescription for pharmacists to dispense medications. These elements include:

- 1. Drug Name
- 2. Drug strength
- 3. Dosage form
- 4. Quantity prescribed
- 5. Directions for use
- 6. Number of refills

It is noteworthy that a Diagnosis is not required for writing medication prescriptions since a drug or procedure may be used for more than one condition. Also, medications are often prescribed "off-label" for a purpose not recommended by the FDA. Similarly, writing Psychological Prescriptions should not be tied only to a given condition.

Psychological Prescriptions for behavioral health follows DEA element requirements for Controlled Substances by substituting Procedure Name for Drug Name. This parallel formulation of behavioral elements develops and enumerates evidenced-based behavioral health procedure codes. Research references must be available to document the efficacy of a behavioral healthcare procedure for the procedure to be eligible for insurance reimbursement. The following representative list of behavioral health procedures includes but is not limited to:

- 1. Procedure Name (These Procedures substitute for the DEA Drug Name)
 - 1. Cognitive Behavioral Therapy (CBT)
 - 2. Evidence-based therapy (EBT)
 - 3. Medication with or without CBT
 - 4. Specialized Techniques, e.g. Eye Movement Desensitization and Reprocessing (EMDR), Exposure desensitization, etc.
 - 5. Biofeedback and/or Neurofeedback
 - 6. Acupuncture
 - 7. Hypnosis
 - 8. Emergency Care Procedures

[It is recognized that there are effort to pay medical treatments with flat sums and make the treating doctor responsible for the entire course of treatment. This would be an unworkable financial arrangement in behavioral healthcare where the patient must assume a major portion of their-own care and cure.]

DEA Elements II (Strength), III (Dosage) and IV (Quantity) for Controlled Substances do not have corresponding equivalent concepts in behavioral healthcare language. Strength, Dosage and Quantity are measurable characteristics of a drug that have been found to affect the therapeutic benefits of the drug. When dealing behavioral health procedures there are measurable effects of the procedure that provide useful information to the doctor and patient alike. These effects include modifications in Frequency of Occurrence, Duration and Intensity of symptoms or other changes in behavior. Changes in Frequency, Duration and Intensity are useful signs of progress of care or lack of progress if changes in these affects are not found. While reductions in Intensity of

symptoms are often the most sought after effect of behavioral care, changes in Frequency of Occurrence and reduction of Duration of symptoms generally precede changes in Intensity. Changes in Frequency are generally the most observable effect that is sensitive to behavioral procedures. Therefore, Frequency of Occurrence is substituted for Dosage of a drug.

II. Frequency of Occurrence of Symptoms (Substitute for DEA Dosage)
Behavioral interventions may require certain actions or activities to be carried out on a daily basis. How, when and how the patient engages in these assignments and how they affect the occurrence of symptoms can be reported by the patient to the doctor for modification of the procedures attempted. When the patient learns what to look for in the way of improvements they tend to become more active in the therapeutic process. This enables the patient to look for additional positive changes are rewarding to them. Failure of the patient to engage in the therapeutic process is diagnostic itself. Less than full cooperation or slackening of the patients' efforts can also be noted discussed with the patient. Behavioral activity tends to vary according to circumstances on a daily basis. A positive therapeutic benefit would be to see lengthening of time between symptom episodes.

III. Duration of Symptoms (Substitute for DEA Quantity)

Behavioral strategies to reduce the Duration or length of a symptom episode lasts are welcomed by most patients. Discussion about the effect on Duration of symptoms by applying of behavioral procedures is another way of involving the patient in therapy. Duration effects can be actively discussed with the patient in the same manner as Frequency of Occurrence changes can be. A positive therapeutic effect would be to reduce the length time spent in the symptom episode. This change stated positively is that the patient can enjoy more time being symptom free. Patients often take periods of being symptom-free for granted and the therapist needs to point out to the patient the progress they have made.

IV. Intensity (Substitute for DEA Strength)

Modification in the Intensity of behavioral symptoms tend to be related to strength of the therapeutic doctor/patient relationship built over the course of treatment. The doctor/patient working relationship tends to wax and wane as therapy progresses or stumbles. During a course of 10 to 12 sessions over a 90-day period, the doctor/patient working relationship should be firmly established and have resulted in marked changes in the Intensity, Duration and Frequency of Occurrence of symptom episodes. If this has not happened and progress has not been made then the patient should be re-evaluated and alternative behavioral strategies considered.

V. Directions for use. (DEA Direction for Administration of Controlled Substances) Printed directions on how to apply the recommended procedure should be given to the Patient at the time the written behavioral prescription is given to the patient. Positive benefits of the procedure as well as potential adverse effects should also be noted.

VI. Time Limited Procedures (Substitute for DEA Refills)

Time limit for application of procedures should be listed on the Psychological Prescription for behavioral healthcare. Placing a time on the procedure is intended to prevent overuse or abuse of the procedure by the patient. It can serve as a liability limitation to preserve the intent of the psychological procedure. Prescriptions for

controlled substances are limited to 90 days and require a renewal of the prescription for continuation of the drug. Thus, requiring a re-evaluation of the behavioral procedure within 90 days would be an important element in the psychological prescription for finite management to support the patient. Of course, regular appointment times can part of the prescription to take advantage of the positive effects of distributed practice. The importance of practice effects could be included in printed directions to assure the positive participation of the patient.

Other Considerations Beyond DEA Guidelines

Psychotherapy and pharmacotherapy are currently the major means of treating mental disorders that are reimbursed by insurers. This is not intended to exclude religious-based procedures, e.g., prayer, used by Christian Scientist Practitioners or other treatments that are less frequently used. Eclectic treatments combining psychological procedures with pharmaceutical drugs provide the balance of reimbursable mental healthcare options that are available to the public. It is generally recognized that various forms of behavioral healthcare pervade all modern mental healthcare treatments.

Patients having a written prescription to take out of the doctor's office may be just as important for treatment outcomes as the medicine itself. British psychologist Philip Ley studied the fact that many patients could not even recall the diagnosis their doctor gave them 20 minutes after leaving the doctor's office. Significant numbers of prescriptions for medication are never filled. Many times patients can't read the prescription or pronounce it or understand the dosage or when to take the medications. Yet, a placebo effect regarding a medication has been established by giving a written prescription for medication for the patient to follow. It is re-enforced by the pharmacist explaining the prescription to the patient.

Biologically oriented critics frequently disparage "behavioral healthcare" as a stand-alone treatment claiming that psychotherapy benefits are largely placebo effects. These critics ignore or minimize placebo effects of prescribing psychotropics and overemphasize the therapeutic value of the medications used. Therefore, it is important to examine what placebo effects are, how they come about and how they are to be measured and evaluated in behavioral therapies.

The term "placebo" comes from the Latin meaning "I shall please." 'Placebo' became the antiphon or first word in prayer when there was no healthcare system and medicinals beyond herbs were largely unknown. Tracing the convolution of the meaning of placebo into present day medical usage of placebo as 'a substance containing no remedial value given to pacify or indulge a patient" is of interest to behavioral healthcare. The original meaning of placebo (I shall please) is derived from the traditional pledge of pleasing a higher power by the person pleading for relief and healing through prayer. The placebo became part of the vesper evening prayers of the early Roman Catholic Church when prayers for the dead, dying and ill were given. Thus, placebo was inevitably co-mingled with health by the supplicants. The original meaning of placebo should be re-considered in measurable evidence-based behavioral health outcomes using Psychological Prescriptions for behavioral healthcare (PPBH).

Psychological Prescriptions for Behavioral Healthcare (PPBH) must be identified with the treating psychologist to get the best therapeutic effect since there is no pharmacist to reinforce the behavioral protocol. The Psychological Prescription for behavioral care should be about 25 words or less (Twitter length is limited to 140 characters) in order to

save time and be simple enough to be remembered and acted upon by the patient. A lengthy protocol regimen or recommendation to read a book is insufficient direction for evidenced-based health care. Psychologists will need to provide written description of procedures for patients to follow. Behavioral reinforcement will occur during development of the therapeutic relationship as the patient carries out the procedures recommended and agreed upon by the patient.

State and territorial laws regulate the practice of psychology. Licensed psychologists are authorized to write prescriptions for behavioral healthcare (PPBH) according to the jurisdiction in which the practitioner is licensed to practice. Licensed psychologists are authorized to diagnose and treat mental disorders with psychological procedures. Several States and jurisdictions also authorize psychologists trained in psychopharmacology to recommend psychotropic medications to prescribing practitioners. To my knowledge there are no State laws prohibiting the writing of prescriptions for behavioral healthcare. The federal government recognizes State licenses of psychologists and employs them to practice in a wide variety of care under federal regulations. For example, federal law permits licensed psychologists to practice electronically facilitated telehealthcare beyond state and territorial boundaries and even national boundaries. Civilian Licensed psychologists writing prescriptions for behavioral health care (PPBH) can contract with the military to provide services via telehealthcare. These contracting psychologists are considered acting under the agency of the federal government and subject to federal regulations.

Examples of Psychological Prescriptions for Behavioral Healthcare

The following examples of written Psychological Prescriptions are presented in abstract format due to space limitations and to maintain the privacy of the patient. Psychological Prescriptions are intended to be part of patients' integrated treatment plan. There may be questions about the appropriateness of the Psychological Prescription due to omissions in drafting this presentation. If questions do arise, the reader should attribute this to the author's drafting rather than the value of the Psychological Prescription. These examples of a Psychological Prescriptions come from the practice experience of a trained Medical Psychologist. Psychologists practice and provide some notion of the breadth of care.

Each of these examples follows the DEA requirements for writing a prescription.

Example 1. John

1. Prior to discharge from the hospital, schedule an appointment with Dr. Ian Smith, or other psychologist, for outpatient cognitive behavioral follow-up evaluation and treatment.

John, a 48 year-old male, had been admitted to the hospital for gastro-intestinal evaluation for a bleeding problem. A psychological consultation was requested when the patient became agitated after a family visitation. The patient confided to the consulting psychologist that the family turmoil was initiated by the patient but was not reported to the attending doctor. The Psychological Prescription directed the patient on post-hospital steps to be taken. The recommended psychological intervention did not require hospitalization for successful completion and would require interventions that were beyond scope of the hospital and required personal consultation before a family intervention could be considered.

Example 2. Cynthia

2. Family psychoeducation and cognitive behavioral therapy for Cynthia to assist the patient with managing her feelings of anxiety, anger and resentment and about her husband's faithfulness. Mindful training, thought stopping understanding of brain anatomy.

Cynthia is a 38 year-old housewife with a teen-ager by her former marriage and two younger children by her present husband. She came from a dysfunctional background that provided a poor model for successful family life. She had poor organizational skills and her family life was out of control. Her husband is a truck driver and is trying to hold the family together. He expects more from his wife than she is currently capable and he needs help in providing direction to his wife and family. The psychological prescription is complex to deal the complications of this family's numerous issues. This prescription is designed to provide support and direction for Cynthia to stabilize herself with better self-management and control within the context of this situation.

Example 3. Chuck

3 Schedule an appointment with Dr. John Jones for hypnosis skill building for sleep initiation and sleep maintenance as a substitute for sleeping pills.

Comment: Chuck is busy 53 year-old salesman was having difficulty sleeping while on the road and had begun taking sleeping pills to reduce his restlessness. He found that the sleeping pills were causing after-effects that were interfering with his job performance and marital relations. His wife recommended he see a psychologist who wrote a Psychological Prescription for these procedures by a psychologist specializing in hypnosis as well as cognitive behavioral training.

Example 4. Marvin

4. Stress management strategies for anxiety episodes with instructions for caregiver on best approaches to deal with mood and pain and how to prevent escalation of these episodes.

Recommendation to attending physician:

Add 1. Aricept smp-qhs for dementia.

Add 2. Paxil 10mgs-ghs (depression and anxiety) sexual obsessivenessl.

Marvin is a 63 year old male who was admitted to a Skilled Nursing Facility suffering his second diagnosed CVA in the past 10 months. He is diagnosed with HTN; Cerebrovascular Disease; Type II DM; CAD; GERD; Osteoarthritis, and GOUT. He currently is prescribed Coumadin, an anticoagulation agent, Norvasc for HTN; Levemir (insulin) for Type II DM; Tramadol (Ultram) for O.A. pain; Lipitor for hyperlipidemia and Allopurinol for GOUT. Marvin had been prescribed Ativan 0.5 mg.s QID for anxiety which was started 6 months ago BID and increased to

this dosage when he began to "act out" per nursing staff just before next dose administrations.

His presenting symptoms are anxiety and depression. He cries episodically during the day and states "I just want God to take me home." He has no suicidal plan and states he would not attempt to harm himself, "I just want to get my life back and go home" or "just let me die". Marvin is often irritated with the staff and is very demanding. He often curses the staff and seems "to never be satisfied" according to nursing staff. He frequently attempts to grab or touch female staff in sexually inappropriate ways when they attempt to bath him or assist him in grooming or dressing tasks. He often forgets what day of the week it is and misinterprets social situations in his environment. He can be combative at times with ADL assistance. He is not presently acutely psychotic but has occasional ideas-of-reference. Marvin often finds initial sleep difficult and his food intake is generally 25%-50% with a loss of 16lbs since admission or to 140lbs.

5. Linda R.

In this case, following prescription of medication and psychotherapies are suggested:

- 1. Return Risperdal to baseline at O.smp grs
- 2. Add a mood stabilizer, i.e, Topamax 50 mgs qhs if not sensitive to this in the past and titrate to therapeutic dosage. This would assist in both stabilization of mood for depressionand mania symptoms, without possibly making the mania worse if Zoloft was further increased.
- 3. Psychotherapy should target among other things: Stress management techniques; Interpersonal relational practice; Building adaptive coping strategies for her Bipolar behaviors. Over time, it is suggested that the Valium be reduced incrementally until discontinued as patients Bipolar symptoms are moderated and she has begun to utilize the coping strategies she has learned.

Linda R. is a 65 year old white female. She was admitted to the nursing home with the following diagnoses: Paralysis, Muscle Weakness, Bipolar disorder, Depressive Disorder NOS, Anxiety Disorder NOS, HTN, and GERD. She was on the following medications prior to being seen by the psychologist on 10/03/2013: Risperdal 0.5 mgs ghs, Valium 2 mgs ghs BID, Zoloft 100 mgs ghs, Trazadone 100 mgs ghs, and Aricept 5 mgs ghs. Her chart reflected that her Risperdal was reduced on 9/13/2013 to 0.25 and she began to display manic behaviors on 9/16/2013. Her daughter stated that she has been on Valium "for so many years that it doesn't seem to affect her anymore." Prior to her current manic episode, she had been in a depressive state for three and one-half years. She displays anxiety and agitation behaviors. She verbalized disorganized delusions and is religiously preoccupied. She is displaying the following behaviors in her current state: demanding, manipulative, verbal aggression, at times resists care and treatment, conflictual interaction with staff and peers. In her depressive state she was very withdrawn and did not want to get out of bed and was constantly and consistently refusing to be seen by the psychologist. Her daughter informed the psychologist that her mother is very fearful of doctors and the "white coats that

they wear." During the assessment, she informed the psychologist that her father had committed suicide when she was 23 years old. She is currently divorced and her marriage was "very dysfunctional" per patient and daughter.

The foregoing examples of Psychological Prescriptions demonstrate that they facilitate successful treatment of patients and assist caregivers in the management of patient care.

PPBH is a useful addition to case management where usual medical care is insufficient to meet the patient's needs. PPBH allows efficient use of staff time in hospitals, Emergency Rooms, Skilled Nursing Facilities. Psychological Prescriptions are adaptable from adding a psychotropic medication to a treatment plan in 25 words or less—or to writing a paragraph to extend care for more complex patient needs by other medical staff.

Psychologists should increase their skills in writing PPBH prescriptions in order to share with patients with a vision, the opportunity and confidence to lead more satisfying lives. The Academy of Medical Psychologists has established Guidelines for training and use of psychologists to write behavioral health prescriptions. The American Board of Medical Psychology can certify training of psychologists in writing behavioral healthcare prescriptions. The objective of Psychological Prescriptions is not aspirational or to define an ideal lifestyle for the patient should achieve. Behavioral health planning between doctor and patient should point out the risks and rewards of the patient's current lifestyle in order to allow the patient to choose their own appropriate goals. Psychological prescriptions give patient the opportunity to examine the value and responsibilities required by treatments suggested and compare them with the risks and rewards of other treatment alternatives.

Summary and Conclusions

Written Psychological Prescriptions for behavioral health (PPBH) are recommended to overcome limitations of oral recommendations for treating mental disorders. A definition of Psychological Prescriptions is offered that parallels the DEA requirements for the prescription of medications. It is believed that PPBH provides a seamless way to integrate behavioral healthcare procedures into general healthcare. DEA regulations are presented that require prescriptions be written for a legitimate purpose. Such purposes include needed health care treatments and procedures but do not stigmatize the patient with a diagnostic label. Guidelines for writing Psychological Prescriptions are described that avoid the use of stigmatizing diagnostic labels.

Psychological Prescriptions can be the basis for creating Current Procedure Terminology codes and assigning of Relative Value reimbursement to increase access to behavioral health care. Nine benefits of Psychological Prescriptions to advance mental healthcare are listed. Examples of Psychological Prescriptions are given and their uses are explained. It is proposed that PPBH can facilitate patient participation, improve treatment outcomes and reduce costs of mental health care.

APPENDIX A

This excerpt is from the DEA 2010 Pharmacist's Manual (p29). 13

Who May Issue

A prescription for a controlled substance may only be issued by a physician, dentist, podiatrist, veterinarian, mid-level practitioner, or other registered practitioner who is:

- 1. Authorized to prescribe controlled substances by the jurisdiction in which the practitioner is licensed to practice, and
- 2. Registered with DEA or exempted from registration (e.g., Public Health Service, Federal Bureau of Prisons, military practitioners), or
- 3. An agent or employee of a hospital or other institution acting in the normal course of business or employment under the registration of the hospital or other institution which is registered in lieu of the individual practitioner being registered, provided that additional requirements as set forth in the C.F.R. are met.

Purpose of Issue: To be valid, a prescription for a controlled substance must be issued for a <u>legitimate medical purpose</u> by a practitioner acting in the usual course of professional practice. The practitioner is responsible for the proper prescribing and dispensing of controlled substances. (Ed. Emphasis added: A procedure can be a legitimate medical purpose those a diagnosis is not necessarily required.)

APPENDIX B

Except from DEA Pharmacist's Manual 2010 Edition (p 34.)¹³

A prescription must be filled after being signed by the practitioner. However, the pharmacist must determine that the prescription is still needed by the patient. While some states and many insurance carriers limit the quantity of controlled substances dispensed to a 30-day supply, there are no express federal limits with respect to the quantities of drugs dispensed via a prescription. However, the amount dispensed must be consistent with the requirement that a prescription for a controlled substance be issued only for a legitimate medical purpose by a practitioner acting in the usual course of professional practice. For a schedule II controlled substance, an oral order is only permitted in an emergency situation (see Section X, Emergency Dispensing).

Refills The refilling of a prescription for a controlled substance listed in schedule II is prohibited (21 U.S.C. § 829(a)). Issuance of Multiple Prescriptions for Schedule II Controlled Substances The DEA has revised its regulations regarding the issuance of multiple prescriptions for schedule II controlled substances. Under the new regulation, which became effective December 19, 2007, an individual practitioner may issue multiple prescriptions authorizing the patient to receive a total of up to a 90-day supply of a schedule II controlled substance provided the following conditions are met:

- 1. Each prescription must be issued on a separate prescription blank.
- 2. Each separate prescription must be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of professional practice.
- 3. The individual practitioner must provide written instructions on each prescription (other than the first prescription, if the prescribing practitioner intends for that prescription to be filled immediately) indicating the earliest date on which a pharmacy may fill each prescription.

- 4. The individual practitioner concludes that providing the patient with multiple prescriptions in this manner does not create an undue risk of diversion or abuse.
- 5. The issuance of multiple prescriptions is permissible under applicable state laws.
- 6. The individual practitioner complies fully with all other applicable requirements

References

- 1. Brill S, Bitter Pill-Special Report, Mar 4, 2013, Time Magazine, NY
- 2. History Food and Drug Administration May29, 2013. www.fda.gov/AboutFDA/
- 3. Free Online Cpt Codes https://www.google.com/#q=cpt+codes
- 4. Antonio Puente Personal communication, Puente@uncw.edu
- 5. Webster's II New College Dictionary. Houghton Mifflin NY
- Wiggins J, Milestone events in the history and development of medical psychology. in Medical Psychology Practice and Policy Perspectives, Ed. John Caccavale. NAPPP Books, 2013
- 7. Employee Retirement Income Security Act of 1974, ERISA.
- 8. Bishop TF, Press MJ, Keyhani S.& Pincus, HA <u>Acceptance of Insurance by Psychiatrists and the Implications for Access to Mental Health Care</u>. *JAMA Psychiatry*. 2014; 71(2):176-181. doi:10.1001/jamapsychiatry.2013.2862
- 9. Caccavale J, Cummings N, Morris J, Reinhardt D, Rubin H, Wiggins J. "Failure to Serve: A white paper on the use of medication as a first line treatment and the misuse in behavioral interventions." *National Alliance of Professional Psychology Providers* 2010 http://www.nappp.org.
- 10. Kirsch I, Moore T, Scoboria A, Nichols S. "The Emperor's New Drugs: An Analysis of antidepressant medication data sent to the U.S. Food and Drug administration" *Prevention and Treatment* 5, no. 23 retrieved March 2004.
- 11. Beardsley RS, Gardocki GJ, Larson DB, Hidalgo J. Prescribing Psychotropic Medications by Primary Care Physicians and Psychiatrists *Archives of General Psychiatry* 45, 12, 1988 1117-1119.
- 12. Thomas Insel Transforming Diagnosis *Director's Blog* National Institute of Mental Health, April 29, 2013
- 13. Behavioral Health Optimization Program Department of Defense 2013