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Post-Traumatic Stress Disorder in Women: Using the ICF as a Framework to Explore Environmental and Personal Factors

Paper based on a presentation at the 2015 National Rehabilitation Association Annual Conference, October 6, 2015, Biloxi, MS.

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Abstract

The International Classification of Functioning, Disability and Health (ICF) is a conceptual framework that was developed by the World Health Organization (WHO). The framework offers a new perspective from which to view a condition or disability in terms of components such as body functions and structures, activities, participation, environmental factors, and personal factors. In an effort to explore the experiences of women with post-traumatic stress disorder (PTSD), risk factors for them will be explored using the ICF as a conceptual framework. The environmental factors and personal factors on the ICF will be matched in order to tailor support services and resources for women with PTSD in counseling settings.

Keywords: PTSD, International Classification of Functioning

The World Health Organization Family of International Classifications (WHO-FIC), which includes classifications for various types of health information, has identified two reference classifications—the International Classification of Diseases (ICD) and the International Classification of Functioning, Disability and Health (ICF). These two documents are major components of the WHO-FIC and are designed to be used together. The ICD focuses on diseases and causes, while the ICF addresses human functioning and disability (WHO, 2016). The ICF (WHO, 2001) is a conceptual framework that offers a new perspective from which to view a condition or disability in terms of components

such as body functions and structures, activities, participation, environmental factors, and personal factors. These factors allow counselors the ability to pinpoint key symptoms of a disease or disability, along with strengths and deficits of the individual in terms of bodily functions and psychological factors, activities that the client can or cannot engage in, and types of participation in the community. Other factors offer further explanation of the client's condition in terms of environmental factors such as available resources and supports within the community, along with personal factors that include individual characteristics such as age, gender, and occupation (WHO, 2013).

Risk factors for women with post-traumatic stress disorder (PTSD) will be explored using the ICF as a conceptual framework in an effort to examine their experiences. The environmental and personal factors on the ICF will be matched in order to tailor support services and resources for women with PTSD in counseling settings.

The Importance of the ICF as a Model

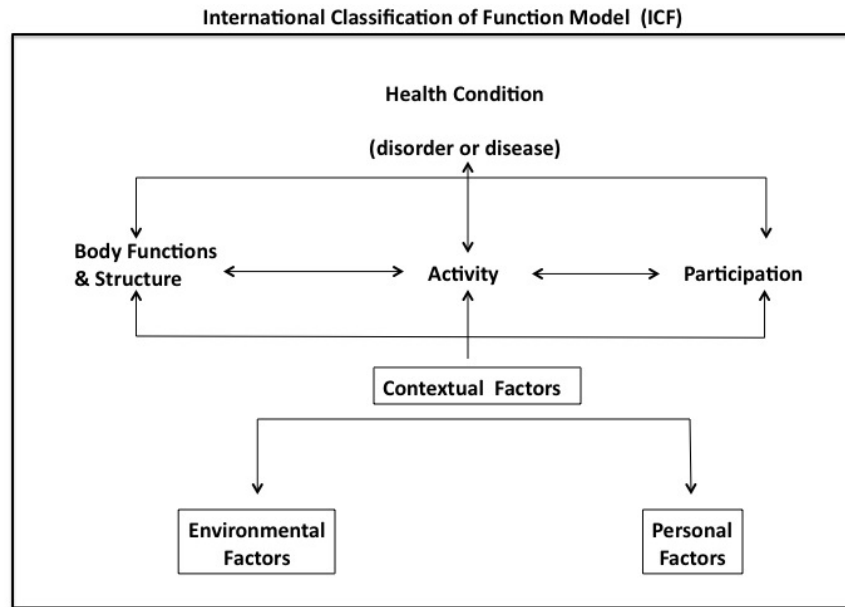
According to WHO (2013), the ICF has been recognized as a combination of the medical and social models of disability that have been structured to produce a biopsychosocial perspective. However, Stucki, Cieza, and Melvin (2007) conceptualized the ICF as an integration of major models of disability, recognizing that the medical model of disability does not fully explain many medical conditions. They further described the ICF as a universal framework with a common language. Stamm and Machold (2007) highlighted the biopsychosocial nature of the ICF, which provides a holistic viewpoint of disability and functioning of the individual.

The ICF has been used as a conceptual framework in the field of massage therapy (Munk & Harrison, 2010); disability statistics and health information systems (Kostanjsek, 2011); rehabilitation (Stucki et al., 2007); rheumatological care (Stamm & Machold, 2007); and nursing, occupational therapy, speech-language pathology, and audiology (Bruyere, VanLooy, & Peterson, 2005). This article seeks to expand the use of the ICF to counseling settings.

The ICF has been useful in exploring issues related to health and functioning, analyzing treatment protocols, conversing with colleagues or patients, and promoting a common set of terms (WHO, 2013). In addition, the paradigm provides assistance in identifying support services and determining whether the client needs "environmental changes or the provisions of personal support" (WHO, 2013, p. 11). The ICF is versatile in that it can be employed in various ways and in different disciplines.

The ICF presents a paradigm for structuring information with regard to health and functioning in a planned way. With the ICF, health information is categorized in terms of functioning and disability, and environmental and personal factors. The categorization provides a picture of the person's health as it relates to functioning and disability and daily environmental factors that impact the individual's health. The term functioning was defined as "a dynamic interaction between a person's health condition, environmental factors and personal factors" (WHO, 2013, p. 5). The conceptualization of health conditions, environmental factors, and personal factors is important for counselors in that, frequently, the health conditions are fully explored while environmental and personal factors are ignored. The relationship of the health condition of the individual and the environment influences the functioning of the individual and the disability.

The ICF conceptualizes information in terms of functioning, disability, and contextual factors. Functioning and disability involve “body functions and body structures and activities and participation” (WHO, 2013, p. 7). The body functions include physiological and psychological workings, and the body structures refer to “anatomical parts of the body such as organs, limbs and their components” (WHO, 2013, p. 8). Activities include “the execution of a task or action by an individual,” while participation refers to “involvement in a life situation” (WHO, 2013, p. 8). The contextual factors include environmental factors and personal factors. The environmental factors involve “the physical, social and attitudinal environment in which people live and conduct their lives. These are either barriers to or facilitators of the person’s functioning” (WHO, 2013, p. 8; See Figure 1).



Adapted From: Model of Disability – ICF Model

Figure 1. International Classification of Functioning, Disability and Health (ICF)

PTSD Risk Factors for Women

Post-traumatic stress disorder (PTSD) in adults and children older than 6 years of age has been defined in terms of diagnostic criteria that address exposure to traumatic events, the presence of specific symptoms (e.g., avoidance, changes in cognition and mood, changes in arousal), duration of trauma, impact on functioning, and trauma that cannot be explained by other factors (American Psychiatric Association, 2013). Symptoms that are common include memories and dreams of the trauma as well as flashbacks.

To obtain a better picture of the health of women with PTSD, the ICF was used as a conceptual framework. The ICF offers a description of health in terms of functioning and disability, as well as environmental and personal factors that may impact the health of women with PTSD. Personal factors may include triggers for PTSD. For women, triggers for PTSD have been identified as results of trauma experienced through “traffic accidents, armed robbery/violence, traumatic childbirth, physical trauma, diagnosis of

childhood cancer, and a range of other civilian traumatic experiences” (Wachter, 2009, p. 2). In addition to these factors, Javidi and Yadollahie (2012) identified other traumatic events such as “war, violent sexual assault and physical attack, being taken hostage or kidnapped, confinement as a prisoner of war, torture, terrorist attack, car accidents, and natural disasters” (p. 1) as risk factors for adults. They also found a higher prevalence of PTSD for women than men. Risk factors specifically for women included “female gender, previous psychiatric problem, intensity and nature of exposure to the traumatic event, and lack of social support” (Javidi & Yadollahie, 2012, p. 1).

Ditlevsen and Elklit (2010) studied the factors of gender and age as they are related to PTSD. Their findings suggested that men had a higher risk of PTSD from ages 41 to 45, while women had a higher risk from ages 51 to 55 years of age. However, women had a higher rate of prevalence for PTSD from ages 13 to 80. Further, Christiansen and Elklit (2008) identified mental health as a risk factor for women for PTSD. In particular, depression and dissociation were predictors of PTSD in their study. Another risk factor identified was age, with the age of onset for women at 22 years and for men at age 30. Positive social support was recognized as a protective factor against PTSD, while negative attention was a risk factor (Christiansen & Elklit, 2008).

In another study of women’s experiences with PTSD, James (2015) analyzed nine studies related to postnatal PTSD after traumatic childbirth. The findings suggested that women who experienced a traumatic childbirth developed postnatal PTSD. The postnatal PTSD symptoms closely resembled symptoms of PTSD to other events. The women responded to treatment with cognitive behavioral therapy.

Harassment has been determined to be a risk factor for work-related PTSD for women. Javidi and Yadollahie (2012) suggested that women tended to experience harassment more than men. They added that

women between the ages of 34 and 45 years of age showed a high prevalence (65%) of “mobbing syndrome” or other work-related stress disorders. The most affected fields are health and social services (15.6%), followed by public administration, hotels, restaurants and transport. In all considered areas of work, women suffer greater discrimination (3.1%) than men (.8%). (p. 2)

Javidi and Yadollahie (2012) identified several other occupations that have risk factors for PTSD. These include serving severely or terminal ill persons, journalists with assignments in trauma-related areas, military deployments in combat locations, police, fire and emergency service workers, construction engineering workers, sanitation workers, and volunteers with disasters. In keeping with these findings, Laqualia (2013) noted that 15% of the armed forces include women, and of this number, about 20% of the female veterans served in Iraq and Afghanistan and may display symptoms of PTSD. Other risk factors for PTSD for females on active duty in the military are sexual harassment and sexual assault (Laqualia, 2013).

Using the ICF With Women With PTSD

While there is little research related to the use of the ICF with women with PTSD, the ICF has been used with various health conditions such as mental and musculoskeletal health problems (Morgell, Backlund, Arrellov, Strender, & Nilsson, 2011) and schizophrenia (Vroman & Arthanat, 2010). This researcher completed a literature review

using Ebscohost, Medline, Pub Med Central and the National Institute of Mental Health using the key words of International Classification of Functioning and PTSD. No articles were found that examined the use of the ICF and PTSD. The *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-V*; American Psychiatric Association, 2013) categorizes PTSD as a trauma- and stress-related disorder. A study by Morgell et al. (2011) addressed the prevalence of trauma- and stress-related reactions among women using the ICF. They examined the use of the ICF while considering gender differences and health conditions of 433 patients. Health conditions were coded with the use of the ICF. They found that symptoms related to severe stress and adjustment disorders were reported for 14.7% of the patients, noting that “disabilities in mental functions and activity/participation were commonly described among women” (Morgell et al., 2011, p. 1).

Since PTSD has been classified as a disability, the meaning of a disability should be discussed with each client. The definition of a disability has been articulated in the Americans with Disabilities Act Amendments of 2008 as “(a) a physical or mental impairment that substantially limits one or more major life activities of such individual; (b) a record of such an impairment; or (c) being regarded as having such impairment” (Section 4.1). This is significant in that stigmas have existed against persons with disabilities since early civilizations, which often led to poor treatment (Rubin & Roessler, 2008).

Scherer and Dicowden (2008) addressed gender differences in disability and rehabilitation using the ICF. They reported that women have attached personal meaning to their disability that may be related to their roles in society, such as caregivers. The presence of a disability may result in the loss of these roles in society. The ICF captures the consideration of these personal meanings under personal and environmental factors. Scherer and Dicowden pointed to the importance of matching the personal needs of women with environmental supports. They suggested that personal factors such as “gender, age and lifestyle interact in a way that results in fewer resources for older women living with a disability” (p. 163). Barriers to environmental supports for older women with disabilities that were identified included a reluctance to use technology (Scherer, 1993) and mobility devices (Hedberg-Kristensson, Dahlin-Ivanoff, & Iwarsson, 2007). Scherer and Dicowden recommended the practice of highlighting ways to improve the functioning of older females with disabilities by exploring preferences for other environmental supports.

In an effort to examine the experiences of women with PTSD, environmental and personal factors relevant to women with PTSD were explored through the use of the conceptual framework of the ICF. The examination of environmental factors and personal factors allows counselors to explore risk factors of PTSD for women along with positive environmental supports and barriers within the context of disabilities.

The ICF can be useful for identifying specific environmental factors and personal factors that women with PTSD may encounter. These environmental factors can include attitudes within the community with regard to women with PTSD. For example, male veterans may be treated with more compassion than females. Other considerations include supportive persons that women with PTSD can call on. These persons may be family, friends, neighbors, church members, counselors who provide services for them,

and treatment facilities. The lack of social support can also be classified within the environmental factors.

Environmental Factors	Personal Factors	Matching of Environmental and Personal Factors
<p>Attitudes—women with PTSD may not be given the same level of compassion as men.</p> <p>Supportive persons—family, friends, neighbors, church members, counselors providing treatment, and treatment facilities.</p> <p>Lack of social support.</p>	<p>Age Gender Race Other health conditions—disability</p> <p>Loss of roles, such as caregiver, as a result of disability.</p> <p>Past trauma experiences—traffic accidents, victim of armed robbery/violence, traumatic childbirth, physical trauma, sexual harassment, sexual assault.</p> <p>Occupations with risk factors for PTSD include military service, nurses, police, fire and emergency service workers, construction/engineering workers, sanitation workers disaster volunteers, working with severely ill patients, and journalists reporting on disasters.</p>	<p>Identify treatment facilities that address personal needs and preferences for service.</p> <p>Programs that treat women with PTSD only.</p> <p>Programs that treat female veterans with PTSD.</p> <p>Programs that treat female active duty military with PTSD.</p>

Figure 2. Matching of environmental and personal factors.

The personal factors for women with PTSD include age, gender, race, other health conditions, and past trauma experiences such as “traffic accidents, armed robbery/violence, traumatic childbirth” (Wachter, 2009, p. 2), sexual assault, and sexual harassment. The consideration of occupations is also a personal factor. Examples, including females serving in combat zones and being a nurse in an inpatient hospital setting, have been identified as risk factors for PTSD (Mealer et al., 2009). Other occupational environments that have been identified as risk factors for PTSD by Javidi and Yadollahie (2012) include health and social services, public administration, hotels, restaurants, and transport, serving severely ill persons, journalists with assignments in trauma-related areas, first responders, and disaster volunteers.

Through the consideration of PTSD as a disability, counselors can examine the personal meaning that the female holds with regard to her disability. This should be explored in order to determine whether the presence of a disability involves the loss of roles within the family or community.

By matching the environmental factors and the personal factors with potential supports, treatment facilities can be identified that address the personal needs and preferences for service within the locality that the woman lives. It is important to ask the client to explain her personal needs and preferences as a part of this process and to explore personal meanings with regard to disability. Also, programs can be identified that provide services to only women with PTSD or female veterans with PTSD. A key issue that should be explored with the client is that the consideration of environmental and personal factors may lead to reduced opportunities for some individuals. (See Figure 2 for Matching Environmental and Personal Factors.)

By placing medical information within the ICF headings of environmental factors and personal factors and then matching the factors, counselors can visualize the unique characteristics that each female with PTSD brings to the counseling session. With this information in hand, counselors can explore treatment facilities, support services, and resources that the client desires. This opens the pathway to providing services that are tailored to the client and would encourage the client to continue in treatment.

References

- Americans with Disabilities Act Amendments of 2008, 897 F. Supp. 423.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Bruyere, S., VanLooy, S., & Peterson, D. (2005). The International Classification of Functioning, Disability and Health (ICF): Contemporary literature review. *Rehabilitation Psychology, 50*(2), 133–121.
- Christiansen, D. M., & Elklit, A. (2008). Risk factors predict post-traumatic stress disorder differently in men and women. *Annals of General Psychiatry, 7*(24).
- Ditlevsen, D. N., & Elklit, A. (2010). The combined effect of gender and age on post traumatic stress disorder: Do men and women show differences in the lifespan distribution of the disorder? *Annals of General Psychiatry, 9*(32), 1–12.
- Hedberg-Kristensson, E., Dahlin-Ivanoff, S., & Iwarsson, S. (2007). Experiences among older persons using mobility devices. *Disability Rehabilitation: Assistive Technology, 2*(1), 15–22.
- James, S. (2015). Women's experiences of symptoms of posttraumatic stress disorder (PTSD) after traumatic childbirth: A review and critical appraisal. *Archives of Women's Mental Health, 18*(6), 761–771.
- Javidi, H., & Yadollahie, M. (2012). Post-traumatic stress disorder. *The International Journal of Occupational and Environmental Medicine, 3*(1), 2–9.
- Kostanjsek, N. (2011). Use of The International Classification of Functioning, Disability and Health (ICF) as a conceptual framework and common language for disability statistics and health information systems. *Public Health, 11*(Suppl 4), S3.
- Mealer, M., Burnham, E. L., Goode, C. J., Rothbaum, B., & Moss, M. (2009). The prevalence and impact of post traumatic stress disorder and burnout syndrome in nurses. *Depression and Anxiety, 26*(2), 1118–1126.
- Morgell, R., Backlund, L. G., Arrellov, B., Strender, L. E., & Nilsson, G. H. (2011). Health problems and disability in long-term sickness absence: ICF coding of medical certificates. *BMC Public Health, 11*, 860.

- Munk, N., & Harrison, A. (2010). Integrating the International Classification of Functioning, Disability and Health Model into massage therapy research, education and practice. *International Journal of Therapy Massage Bodywork*, 3(4), 29–36.
- Rubin, S. E., & Roessler, R. T. (2008). *Foundations of the vocational rehabilitation process* (6th ed.). Austin, TX: Pro-Ed.
- Scherer, M. (1993). What we know about women's technology use. *Women Therapy*, 14(3/4), 117–132.
- Scherer, M. J., & Dicowden, M. A. (2008). Organizing future research and intervention efforts on the impact and effects of gender differences on disability and rehabilitation: The usefulness of the International Classification of Functioning, Disability and Health (ICF). *Disability and Rehabilitation*, 30(3), 161–165.
- Stamm, T., & Machold, K. (2007). The International Classification of Functioning, Disability and Health in practice in rheumatological care and research. *Current Opinions in Rheumatology*, 19(2), 184–189.
- Stucki, G., Cieza, A., & Melvin, J. (2007). The International Classification of Functioning, Disability and Health: A unifying model for the conceptual description of the rehabilitation strategy. *Journal of Rehabilitation Medicine*, 39(4), 279–285.
- Vroman, K., & Arthanat, S. (2010). ICF and mental functions: Applied to cross cultural case studies of schizophrenia. In J. H. Stone & M. Blouin (Eds.), *International Encyclopedia of Rehabilitation*. Retrieved from <http://cirrie.buffalo.edu/encyclopedia/en/article/308/>
- Wachter, K. (2009, December 1). Early interventions do not prevent PTSD. *Internal Medicine News*. Retrieved from [http://www.internalmedicineneeds.com/?id=495&tx_ttnews\[tt_news\]=10860&cHash=4af7fef668a83a24fbe082de19a15af7](http://www.internalmedicineneeds.com/?id=495&tx_ttnews[tt_news]=10860&cHash=4af7fef668a83a24fbe082de19a15af7)
- World Health Organization. (2001). *International Classification of Functioning, Disability and Health: ICF*. Geneva, Switzerland: Author.
- World Health Organization. (2013). A practical manual for using the International Classification of Functioning, Disability and Health (ICF). Retrieved from <http://www.who.int/classifications/drafticfpracticalmanual2.pdf?ua=1>
- World Health Organization. (2016). *International Classification of Diseases 10*. (5th ed.). Geneva, Switzerland: Author. Retrieved from <http://www.who.int/classifications/icd/en/>

Note: This paper is part of the annual VISTAS project sponsored by the American Counseling Association. Find more information on the project at: <http://www.counseling.org/knowledge-center/vistas>