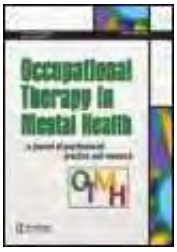
SENSORY DEFENSIVENESS



When working on the Adult Psychiatric Care Unit at UMASS Memorial Medical Center I noted that many patients with trauma issues demonstrated symptoms of sensory defensiveness. I developed a research project that focused on the use of the Wilbarger Protocol (a sensory program) for the treatment of patients with trauma issues as well as symptoms of self-injury and sensory defensiveness. I have written a research article on that project which was published in *Occupational Therapy in Mental Health*. It is available through the following link http://www.tandfonline.com/doi/abs/10.1300/J004v18n01_03

The Sensory Defensiveness Screening for Adults was developed as a screening tool for the research project and it is available in the Sensory Connection Program: Activities for Mental Health Treatment Handbook.

Although I observed many symptoms of sensory defensiveness in patients on the UMASS unit we did not have the time or resources to provide proper assessment and treatment with the Wilbarger Protocol (a comprehensive treatment using deep pressure touch, joint compression, and a specific sensory diet). A plan to help patients deal with symptoms of sensory defensiveness was developed and it is also included in the Sensory Connection Program: Activities for Mental Health (Manual and Handbook). It is no substitution for the Wilbarger Protocol but it helped many patients. Patients claimed that the educational component of the plan was most important because it helped them to understand their symptoms.

Learning about Sensory Defensiveness

Background Information

Ayres (1979) described a phenomenon of touch avoidance symptoms she called tactile defensiveness, which she believed had serious implications affecting development as well as function. Since physical touch is essential for personal and intimate relationships and early care giving experiences, tactile defensiveness negatively impacts the ability of individuals to nurture and be nurtured. This phenomenon is now referred to as sensory defensiveness because clinicians have found that symptoms can occur across one or more of the sensory systems including oral, gravitational, auditory, visual, and even olfactory. Defensive symptoms are caused by an over-reaction of the normal protective senses resulting in social and emotional problems including patterns of avoidance, sensory seeking behaviors, hyper-vigilance, anxiety, and even aggression (Wilbarger, 1995).

Wilbarger & Wilbarger (1995) define sensory defensiveness as adverse or defensive reactions to non-noxious stimuli. They theorize that genetic disposition as well as physical trauma to the body (e.g. stressful birth, accidental injury, physical abuse) can set off this condition of sensory distortion. Lack of inhibition of sensory input, they believe underlies defensive reactions. Symptoms vary widely and

include withdrawal from touch, discomfort from certain clothes, over reaction to sounds, dislike of foods with mixed textures, exaggerated personal space, increased startle reflex, and dislike of complex visual stimuli such as fast moving objects or colors.

People with a history of physical or sexual abuse, torture, institutionalization, sensory deprivation, or a traumatic injury, have about an 80% chance of developing sensory defensiveness. Therefore, statistics alone tell us that we encounter clients with this problem regularly in psychiatric care and especially in clients with Post Traumatic Stress Disorder (PTSD). Symptoms of sensory defensiveness are also very common in patients with Developmental Disorders (Hanschu, 1995; Wilbarger & Wilbarger, 1995). 2

Symptoms

These are some of the classic symptoms of sensory defensiveness. Many patients have a few of these symptoms but sensory defensive people tend to have many of them and their symptoms disrupt function.

- Misinterpretation of sensory events
- Irritated by sensory input that others easily ignore
- Exaggerated avoidance responses
- Touch is interpreted as painful, harmful, or a threat
- Seeks unusual forms of tactile stimulation
- Lashes out or threatens others to avoid approachment
- Illogical preferences and clothing habits
- Once aroused, difficult to calm
- Disruptions in self care
- Unusual pain responses
- Unpredicted emotional outbursts
- Avoids crowds and lines in stores
- Hyper-vigilant
- Unusual eating habits, dislike of mixed food textures
- Social withdrawal
- Dislike of fast moving visual input, become carsick easily
- Balance problems and dislike of motion
- Self-injury
- Strong need for routine
- Upset by loud noises or background noises such as a light buzzing

Impact of Sensory Defensiveness on Daily Living

Sensory defensiveness is a phenomenon that ranges from mild to severe. It may impact a few areas of a person's life, such as clothing choices and avoidance of crowds. It can also impact almost every aspect of a person's life, including hygiene, the ability to tolerate interaction with others, sexual relationships, self-esteem, and safety. To people who are sensory defensive, someone brushing up against them can

actually feel painful. Tags on clothing, which most people ignore, can be intolerable. They often avoid lines or crowds because they fear that someone might bump into them. Very often, hygiene is impacted because they can't stand anything touching their face, such as a face cloth. The feeling of a toothbrush can be particularly irritating. The feeling of water from a shower can feel like pins and needles. Sensory defensiveness can cause people to strike out at others or to become aggressive if they feel someone might touch them or come too close to them. It is often the cause of explosions of emotions that seem to come from nowhere; something in the environment bothers the person but the stimulus goes unnoticed by others.

When people are sensory defensive roles are compromised in ways the client can neither comprehend nor explain. Body image problems abound; after all, these clients have been betrayed by a body that sends mixed messages and causes them pain and discomfort as they attempt to interact in a sensual world. The enormity of the problem is highlighted by this paradox. The sensory system is the only way people can receive information from the world around them. When people are extremely sensory defensive, this information is immediately distorted. As with any disorder, the symptoms of sensory defensiveness wax and wane according to stress and other environmental factors.

Strategies to Minimize Symptoms

Sensory defensive patients work around their problems by using a variety of positive and negative strategies. Often the behaviors we see as problematic are actually serving to calm and protect the patient. That is the reason these behavior patterns are hard to break; they serve an important purpose, and the patient has learned that they work. Until we can teach them an equally effective alternative or else address the underlying neuro-biological problem of sensory defensiveness, the client will cling relentlessly to the behavior that allows survival in an intolerable world. Such behaviors include avoidance responses, repeated wearing of favorite clothes, wrapping in blankets, layering of clothing, intolerance of crowds, rituals, resistance to change, isolation, and sometimes self-harming behaviors.

Misinterpretations of Behaviors

Many times caretakers misinterpret sensory problems as being behavioral problems. For example, a new patient who begins acting out as soon as he enters the cafeteria may be reacting to the noise and confusion; his behavior could be easily interpreted as attention seeking. Problems that stem from a sensory defensive response are very hard to treat with a behavioral plan without addressing the underlying problem. The person is unable to take control of the situation regardless of the reward or punishment. Behaviors are usually complex and can be a combination of defensive responses as well as learned maladaptive behaviors. It is worth looking at any acting out or inappropriate behaviors to determine if there is a sensory component to the behavior.

Because sensory defensiveness is often associated with tactile problems, other forms of defensiveness can be overlooked. Formal assessment tools include the *Adolescent/Adult Sensory Profile* (Brown & Dunn, 2002) and the *Sensory Integration Inventory-Revised for Adults with Developmental Disabilities* (Reisman & Hanschu, 1990); these tools can be helpful in sorting out sensory related symptoms.

Clinical Story

The story of this individual admitted to the Developmental Disabilities Unit exemplifies the confusions in the forms of defensiveness.

Patrick was a severely cognitively impaired young man who acted out frequently. It was obvious to caretakers that he had some type of sensory related problem, which they assumed to be tactile defensiveness. Many behaviors did not fit this diagnosis, however, such as his extreme difficulty in getting himself up off of the floor. The occupational therapist noted that he seemed comfortable with some forms of touch, especially if the person approached him from behind. He resisted any rocking motions, which are usually very calming to defensive individuals. Assessment revealed that Patrick had vestibular defensiveness. The treatment approach for this form of defensiveness needs to be quite different from the usual approaches that work with tactile defensiveness, since rocking and movement activities tended to be stressful to the individual. His treatment program needed to have a strong emphasis on deep pressure touch, which he tolerated well. Since vestibular input is so closely aligned to sight, visual input needed to be monitored. For example, if a person reached out in front of Patrick to touch him he became very upset, causing caretakers to believe he disliked touch. Actually 4

the visual input of the person reaching towards him set off an uncomfortable vestibular reaction.

As the therapist noted, he was very accepting of being touched or even hugged from behind. Simple navigation around the unit was enhanced when a staff member led him from behind using firm touch on his shoulder. Understanding the types of situations that upset Patrick made it easier to plan for success oriented experiences and to avoid problematic sensory input whenever possible.

Treatment with the Wilbarger Protocol

Wilbarger (1995) feels that unless treated, the disorder will never really go away. She prescribes a treatment she calls the Wilbarger Protocol or the Wilbarger Deep Pressure and Proprioceptive Technique (DPPT). This professionally guided treatment consists of using a specific soft, surgical brush to give intense deep pressure stimulation to the arms, back, and legs, which is immediately followed by joint compression of the wrist, elbow, shoulder, hip, knee, and ankle. Deep pressure stimulation must be done in a very particular way or else it can be irritating and detrimental to the patient. For example brushing is never done on the face or abdominal area because it could set off autonomic reactions. If performed correctly, this treatment carries practically no risk or negative side effects. This procedure is repeated every two hours during the day because it has been established that the effect of this intense stimulation lasts about that long.

The effect of this treatment is both calming and organizing. Although sensory defensive people may resist the idea of using this brush, once they experience the use of the brush, they usually accept it and even report that they enjoy it. The Wilbarger Protocol also emphasizes the incorporation of other sensory stimulating activities into the daily routine of the patient. These activities or exercises must give strong sensory input to the system by way of deep pressure touch, proprioception, or vestibular system. The particular activities chosen are worked out between the client and patient according to interests,

availability of equipment, overall health, and practicalities, such as schedules. This treatment usually lasts approximately a month if performed with great consistency. Wilbarger feels that patients receive some degree of benefit regardless of consistency. She stresses that for true recovery it is imperative to have consistency and the diagnosis of sensory defensiveness must be taken seriously. **In order to treat patients with the Wilbarger Protocol, it is important to receive proper training and to update training regularly** (Wilbarger and Wilbarger 1991, 2002a &2002b).

Information on Sensory Defensiveness, the Sensory Defensiveness Screening for Adults, and an Acute Care Treatment Plan for Sensory Defensiveness can be found in the Sensory Connection Program: Activities for Mental Health Treatment books available at the following link:
http://www.therapro.com/The-Sensory-Connection-Program-P321031.aspx

