

# THE EFFECTIVENESS OF WATSU ® THERAPY FOR FALL PREVENTION AMONG THE ELDERLY: A CASE STUDY \*

The Effectiveness Of Watsu ® Therapy for Fall Prevention among the Elderly

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## ABSTRACT

**Introduction:** With an increase in life expectancy, falls represent a serious health problem for the elderly. Loss of self-confidence and autonomy are consequences related to the risk of fractures, induced injuries etc., and even in death in the most extreme cases. Fear of falling while aging makes the elderly population less active in their social environment and may even exclude themselves from society. **Objective:** This case study, analyzed the effects of Watsu ® in fall prevention among the elderly. **Method:** To analyze effects of Watsu ® in fall prevention, the Berg Balance Scale (BBS) was applied during the evaluation phase, as well as in the reevaluation phase, during the 16 Watsu ® sessions, adding up to a total of 18 sessions. **Results:** There was a 15-point increase, changing the volunteer's score for predisposition to falling into no falling risks, according to the BBS evaluation. **Final Considerations:** This study presented the volunteer's fall risk improvements with the Watsu ® technique.

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\* This is a case study submitted to achieve a Specialist Degree in Theories and Techniques for Integrated Care, at the Federal University of São Paulo-UNIFESP. The study was approved by the Ethics Committee for Human Research - UNIFESP (CAAE: 45425115.2.0000.5505), according to the standards established by the National Health Council Resolution 196/96 on research involving human subjects.

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Fear of falling while aging makes the elderly population less active in their social environment and may even exclude themselves from society. With an increase in life expectancy, falls represent a serious health problem for the elderly. Loss of self-confidence and autonomy are consequences related to the risk of fractures, induced injuries etc., and even in death in the most extreme cases.

My clinical practice, which has also been registered by many other Watsu ® practitioners, has demonstrated the efficiency in treating patients with reduced body mobility or muscle tension due to physical and/or emotional stress and the patients' feedback suggests induced relaxation states (Cunha, Carvalho, Caromano, 2010). This study had the purpose of verifying the effectiveness of Watsu ® therapy for fall prevention.

In order to evaluate the effects of Watsu ® for fall prevention, we used the Berg Balance Scale (BBS), which is a low cost and reliable instrument used in the scientific research environment. It consists in a functional evaluation of balance performance, based on 14 common day-to-day activities that assess posture control, including stability and anticipatory balance, which require different strength, dynamic balance and flexibility levels (Silva et al., 2007). The BBS was applied in two phases: during the evaluation and reevaluation sessions and during the 16 Watsu ® sessions, adding up to 18 sessions.

The 63-year-old volunteer received a confirmation about the absence of contraindications and was clearly aware of the objectives and approaches used in the case study. She had 8 falls last year, and the last one had caused so much fear that she wouldn't even leave her House alone and was taking medication for high blood pressure, arthritis, arthrosis and osteoporosis. The volunteer had no traumatic event in water, but was afraid of deep pools and had never performed physical activities in the water. She performed the assessment (BBS) and the informed consent term. Before we began the sessions in the pool, we waited for the medical certificate stating that the patient could practice passive stretching activities in a heated swimming pool (33° to 35° C).

According to the methodological model, the elderly woman selected would participate in sixteen Watsu ® sessions, adding up to a total of 18 sessions, including one evaluation session and one final reevaluation, where the BBS would be applied. During the sixteen Watsu ® sessions, we also used a wellness assessment prepared specifically for this research project. The Watsu ® sessions took place twice a week, and each session lasted for about 60 minutes in the pool. The session was based on a sequence of Watsu ® level I movements, adapted to the volunteer's body conditions.

The sessions took place in June and July 2015, and we performed a total of ten Watsu ® sessions; however, it is important to note that the sessions happened during winter and the patient missed a few sessions, when she had the flu or felt sick due to the cold.

Upon arriving at the clinic, the volunteer partially filled out the wellness assessment, would change into her swimsuit and then we would begin the Watsu ® session, which would last for about 60 minutes. In the pool, once the volunteer was already resting her back on the wall and using earplugs, we would place the floaters on her thighs.

After giving her the final instructions about the procedures used during the session and making sure, she had clarified all of her questions; the Watsu therapist would guide her away from the pool wall and begin the basic level I protocol, respecting the limits of the volunteer's body.

After she had already showered and changed, we asked the volunteer how she was feeling and she finished filling out the wellness assessment. The Watsu therapist accompanied the volunteer during the entire time in the clinic, to ensure the necessary care and safety. During the last session, we performed the reevaluation with the Berg scale and shared the score change results with the patient.

After three sessions, according to the basic protocol for level I, the queen movements were defined (base movement to explore new possibilities according to the needs of the volunteer's body): dance/balancing breathing, slow movements, accordion, releasing the back, exploring movements,

explore door I, explore door II, quiet, seaweed position: with the right shoulder, turn and pull, sweep under shoulder, spine pull, curling the back, side saddle, open saddle or closed saddle, head move lift wave, side sandwich A, side sandwich B, final position on the wall. The queen movements were selected because we realized that the volunteer's body was extremely rigid, so the session structure was based on the queen movements.

We observed the effects of Watsu ® according to the volunteer's feedback and identified significant changes in her autonomy, like choosing to go somewhere she wanted to, without fear of falling. It is important to note that Watsu ® works on improving the patient's wellness, encouraging emotional sensitivity. This happens due to the person's level of participation, allowing herself to float in the arms of the therapist, receiving a type of care she had never received before, the reception, new touches, overcoming the fear of water, freedom and, finally, connecting with her own individuality.

### **Subjective observations on the case study**

The patient mentioned many new experiences during the Watsu ® sessions. Her ability to confront life was clearly transformed. We have included some small excerpts of the moments considered important, based on the volunteer's feedback, including short discussions.

#### **Going to the pool alone**

During the third session, before going into the pool, the volunteer mentioned: "— You know, I think I can come here to the pool alone, there is a van that stops near this street, and goes all the way to a bus stop that is very close to home, I think I'll try, do you think this will be good for me? It has been a long time since I have been on a bus alone! "

After the fourth session, the patient would mostly arrive alone for the sessions and, and on the way back, since it was dark, her sisters would pick her up. It is important to mention that after a falling at a bus stop when she tried to get on the van, her life was completely transformed, because she had no desire to leave the house alone; she was already retired, and stopped caring for a close relative, which she used to help. This fall represented the moment when she stopped interacting with her social environment, staying at home and finding various excuses not to leave, even when she was with someone.

A fall can be a traumatic event for an elderly person, becoming a significant factor, due to its psychological impact. Predisposition to falling increases immobility. The

elderly may have the post-fall syndrome, related to fear of returning to daily life activities, and thus cause new accidents; secondary consequences may arise, such as isolation, sadness and/or depression and early admissions into long-term institutions (Santos et al., 2012).

Another way water affects our consciousness is through the way it affects our sense of limits. When water is at the same temperature of our skin (which is the ideal for Watsu ®), our pores open, and our capillaries dilate, as our body feels limitless. Some say that once we experience ecstasy, and we know how to access it, we will be able to see it even amidst the greatest of sorrows. Watsu ® helps people perceive a level of consciousness where they can face anything, with the same water limits (Dull, 2001).

### **Trips to the Movies and mass with Marcelo Rossi**

Movies: the volunteer had not been to the movies in over 10 years. After a session of Watsu ®, she decided to go have dinner at the mall close to her home and went into the cinema, around 10:30 pm. During the film, she realized she had not told any family members (the patient lives with two sisters and two nephews); she "quickly" left the theater and called one of her sisters who went to pick her up by car later on.

Liberation Mass: the patient started this subject breathing deep and said: "— It was so good to go back there. Ever since I fell at the bus stop, I never went back, I do not know why. I was away from such a beautiful place for 8 months, and now I feel like I have to go back more often, I want to go back to doing things I enjoy in life! ".

Dull (2001) explains: "upon moving freely in the water, being repeatedly stretched and placed in the fetal position, the adult has the opportunity to heal any pain or loss that he or she could still be carrying. If there are any restrictions, the body can feel free in the water. If any separation pains are repressed, the patient can feel continuity between the past and present. This is not regression, but creation, the power to create life as a whole, between the past and present. "

### **Desire to go back to work**

Before starting the Watsu ® session, the volunteer was excited and said : "— I need to tell you about a new desire I have experienced: I'm going to start making little boxes to sell and maybe even study to be a caregiver, what do you think? Now that I am more confident to leave my House, I've been feeling the urge to increase my income, because you know how it is to live off retirement! My nephew's girlfriend always insisted in teaching me how to make some beautiful boxes that she makes, so I can keep my mind busy and I think the course will also help, even after we finish the sessions in the pool I will continue going out".

It's time we establish a new paradigm, where the elderly population is active, in a society with age integration possibilities, we must see the elderly as active contributors and beneficiaries of the development, including those who are sick, fragile and vulnerable and protect their rights and safety. This paradigm takes on an approach that recognizes the importance of relationships and support among family members and different generations.

This new paradigm also challenges the traditional vision that learning and studying is a function that is limited to children and young people, and that one must work during their middle age, and retire in the so-called third age. This new paradigm requires programs that support learning at all ages and allows people to enter and leave the labor market to become caregivers during different phases. This approach supports intergenerational solidarity and provides greater safety for children, parents and the elderly (Active aging: a health policy, 2005).

## **Conclusion**

Therefore, the effects of the technique in regards to the prevention/reduction of falling risks for the selected volunteer were observed, as well as a 15-point increase, in the volunteer's score for risk predisposition (which was 39 points) and the volunteer was considered to have no risks for falls (54 points) according to the BBS assessment. Although subjective, the volunteer's resourcefulness to participate in the Watsu ® sessions was evident. With each session, her rigid body gave into the water and the gentle stretches, as if we were climbing one-step at a time, breathing together, understanding her possibilities and limits. We were increasing her movements continuously, and at the end of the session, the volunteer would mention that those moments made her feel good, removing tension from her body, which she simply was not aware of, nourishing her rigid body with the care provided by Watsu ®. This specifically is not measurable, however it is concrete and through it, we can feel the volunteer's wellness improving, leading to the change in her score for predisposition to falling, and the patient ended up eliminating fall risks.

Thus, this study highlighted that the Watsu ® technique with the selected volunteer generated improvements in regards to falls. We hope that more authors become interested in Watsu ® interventions, for fall prevention, as Benson, Khashy and Jacobs apud Cunha and Caromano, 2003 quote: "relaxation has become a very valuable tool for health, well-being and physical performance". Because as explained in the Active aging: a health policy (2005) document, we expect a growth in the group of elderly people that have better health conditions and contribute actively within the community. We believe in the importance of expanding this type of preventive health study for the elderly, so that in the near future this technique may encourage more discussions and scientific validation, and also be recommended as a fall prevention therapy.

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