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HANDBOOK for SNOEZELEN

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1. INTRODUCTION

This document will show the importance of sensations in the person with AD. The emotional well-being, quality of life, calm and communication of the person with AD, will be a reality if as caregivers we are aware of the sensory functioning of the person cared for.

Snoezelen is an intervention philosophy that understands that emotional well-being is linked to the fact that the person finds himself in his daily life in an environment appropriate to his abilities of perception and sensory processing.

In this sense, we will specify different recommendations for each sensory channel that can be carried out from the person's home.

People with more advanced dementias, due to their limitations in information processing, may present different levels of disconnection with the environment that, in turn, could cause the appearance of different behavioral disorders. Interventions based on multisensory stimulation are considered an effective method to increase the involvement of participants with the environment, thus reducing the probability of the appearance of such disorders (Vaca et al., 2018).

People with neurodegenerative processes such as dementias have altered the ability to correctly process the information coming from their environment which can lead to disconnection with it and the appearance of psychological and behavioral symptoms of dementias, such as agitation or apathy, which in turn, would lead to a decrease in their levels of quality of life (Vaca et al., 2018).

The environment, the domicile in which the person with AD is located, will be fundamental to contribute to the emotional well-being of the person, to his level of connection with the world around him.

We know that a neurodegenerative pathology, such as dementia or Alzheimer's, among other consequences, implies an alteration in perception, processing and response to sensations.

A person with AD will have to a greater or lesser degree compromised the functionality of the prefrontal cortex. As a consequence, cognitive abilities will be affected, as well as executive functions, reasoning, among others.

The Development Pyramid by Williams & Shellenberger (1996), clearly shows us that in situations in which, for example, a neurodegenerative deterioration, the upper parts of the pyramid are affected, we also have a way to "connect" with the person, to communicate with him. In this sense, the base of the pyramid, focused on the basic sensations (touch, proprioception and vestibularity) and accompanied by exteroceptive sensations (visual, auditory, olfactory and gustatory), will be the way to offer the person the emotional well-being to which he is entitled, whatever his level of deterioration.

The pyramid of Williams& Shellenberg's development, then also makes sense at the end of life, in the process of deterioration of the person, in which the last abilities that will be preserved will be those of the base of the pyramid, that is, the basic sensory abilities.

That is, at the end of life, when compromised situations of neurocognitive deterioration appear, the roof of the pyramid will obviously be affected. In this vital process, it is essential that we place ourselves at the base of the pyramid, in the sensations.

The person will express, communicate, feel, connect from sensory. The way, perhaps the only way, to be able to offer a life of quality and connection with the person, is through the sensations.

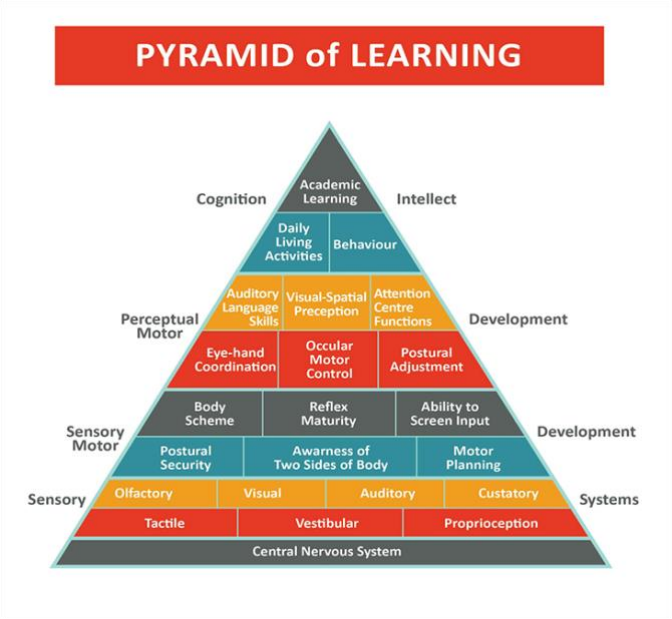


Fig. 1 Development Pyramid . Williams, S. W. & Shellenberger, S. (1996)

2. CONCEPT

The person with AD has sensory impairments, will have impaired the ability to perceive and process sensory information. The person with AD will be affected by their cognitive ability and, in many cases; communication with the person will be based on their sensoriality. Therefore, it is essential to adapt the sensory environment, to offer the person sensations appropriate to their abilities.

The sensations that the person with AD receives at each moment basically come from their environment. We can ask ourselves:

- How does the person feel the bodily sensations? The temperature, the pain, the sensations in your skin on a day-to-day?
- What does the person see? How do you visually perceive your surroundings?
- What does the person hear? How do you perceive the sounds, noises of your environment?
- How does the person perceive and feel his body movements? How do you feel the movement, the postural changes?
- How do you perceive aromas? How do you feel the tastes, the flavors, the textures?

The caregiver should ask these questions. The answer to each of them will be individual; it will depend on each person with AD. But it is essential to understand that, for the well-being of the person we must know the individual responses to the situations mentioned.

The person's home, its spaces, the daily activities in the day to day of the person, are full of sensations.

These sensations can generate in the person responses, pacifying or defensive behaviors. They can lead to a state of tranquility or irritability. They can provoke a relatively peaceful or relatively altered life, with disruptive behaviors.

It is essential, therefore, to offer in the environment of the person, in his home, in his care, an environment and an adequate accompaniment adapted to his state, to his tastes and preferences.

The caregiver should have a minimum knowledge of the sensory impairments that the person with AD may have. The caregiver must be able to understand that the person with AD perceives the world and the sensations differently and therefore may have different reactions and behaviors.

Taking care of a person with AD should be considered as an opportunity to get to know each other, to grow together and to share a world, perhaps previously unknown.
The different rooms of the house, especially those inhabited by the person with dementia / Alzheimer's, must generate a peaceful, pleasant and orderly environment.

The following aspects must be taken care of: order, lighting, sounds, meals/tastes, aromas/smell, touch/comfort and vestibular/movement/postural changes.

2.1 ORDER

The place, the space where the person with AD lives will be a reference in their spatial orientation. Care must be taken to ensure that this space is tidy, with family and significant references for the person. For this it is recommended:

- ✓ Have the furniture distributed widely, which facilitate mobility.
- ✓ Do not overload the spaces with unnecessary furniture or objects.
- ✓ Do not change furniture without a justified cause.
- ✓ In order to favor the preservation of the person's autonomy, try to offer an accessible space.

2.2 LIGHTING

Vision in the elderly person with dementia and Alzheimer's:
During normal aging, the size of the blind spot (area of the retina where the optic nerve arises), and the visual fields are progressively reduced. The adaptation to darkness is slower. Some of the most common visual disorders are:

- Senile cataract, glaucoma and senile macular degeneration, the latter being the main cause of blindness of the Aforementioned difficulties influence:
  - The time the older person needs to identify visual stimuli,
  - Can affect the person's connection to the environment
  - Possible need for an adaptation of the person's routines
  - Possible supports (material and specific personnel)
- The person with dementia usually presents visual difficulties, including difficulty of depth and greater sensitivity to contrasts. These difficulties exacerbate behaviors such as agitation in the face of glare and changes in color perception.

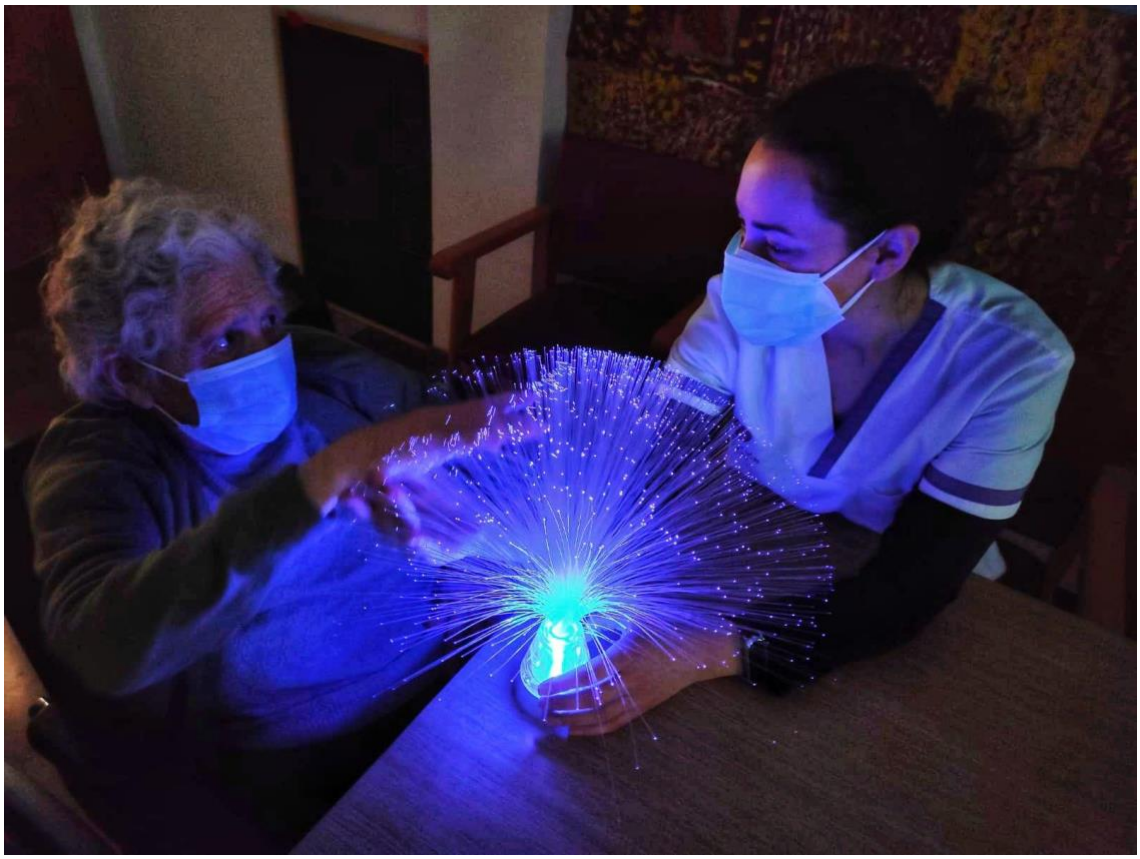
Some recommended strategies:

- Reduce glare
- Increase contrasts appropriately
- Minimize the effects of depth perception difficulties

In general, it is recommended, whenever possible, that the person can enjoy natural ambient light. Being able to offer the person views to the outside will connect them with the environment, place them at the time of day, and help their orientation in a natural way.

When artificial light is needed, it is essential that we have warm light. Artificial lighting is recommended to be indirect, not to dazzle the person. In the room, a night lamp is recommended, which facilitates the care that may be needed during the night with the least possible interruption in the quality of the person's rest.

On some occasions, in some activities, for example read, look at photos, etc., a focused and clear light may be needed to help the person in their fixation and visual follow-up. In this sense, having white, clear and focused light at a certain time will be of great help.



2.3 SOUNDS

A high percentage of older people have hearing impairments. Frequently there is a hearing loss of sensory-neural type, that is, of the inner ear and / or acoustic nerve, in which a decrease in the perception of high frequencies (acute) is observed. This causes consonants that have higher frequencies to be mis-heard and the perception of vowels to predominate, which has important effects on the patient's understanding.

Older people with AD may have auditory hypersensitivity or hyposensitivity. It is important to assess the auditory sensory perception of the person to try to offer environments as comfortable as possible.

Auditory hypersensitivity will involve reactions of restlessness in environments with loud noises or sounds, screams, excessive volume.

Hyposensitivity implies that the person needs excessively high auditory stimuli.

In both cases, what is very evident is that in the auditory perception of the elderly person, the "clarity of environmental stimulation" is fundamental. That is, not too many sounds at once intermingled. For example, screams, voices, television, music…

It is a priority to take care of the tone of voice with which we address the person. We must talk to the person once we have made adequate eye contact with the person.

The tone of voice will be modulated according to the auditory perception capacity.

Excessive shouting at the person can cause discomfort. It is necessary to speak softly to the person, but at the same time, letting perceive what we are telling.

The ambient sound will be very important for the well-being or discomfort of the person. An environment with background noises, such as a television or radio in continuous operation, will make it difficult for the person to focus their attention on the verbal message.

It is recommended that the television or music be in operation only at times when the person is in a position to perceive them. The fact that there is a continuous background noise can cause discomfort in the person.

2.4 MEALS/ TASTES

The number of taste buds decreases with age. Each remaining taste bud also begins to atrophy (lose mass). Sensitivity to taste sensations often decreases after the age of 60. Common sense says that given the impaired sense of smell in people with Alzheimer's, taste is also affected. But there is more. It is not only that Alzheimer's patients do not perceive flavors with the same intensity, but that, at a certain point in the disease, in the moderate and advanced stages, they stop recognizing which food corresponds to that flavor. It is believed that this circumstance, rather than responding to the deterioration of the cerebral taste centers, is justified by the patient's own cognitive deterioration, which is intensifying.

The person continues to perceive the flavors, only he no longer knows what they mean. This situation may imply that the refusal to eat by patients may be due to the fact that the food simply does not taste like anything to them and, at a certain point, they do not know if it is food or what it is that they feel.

It is advisable to use spices to accentuate the flavor of food, increase the diversity of colors on the plate to make it more attractive, and try to make food a moment of enjoyment. It's hard, we know, but it's worth trying.

Eating may be one of the pleasures that a person can enjoy in the old age stage. It will be essential to know one's tastes and preferences, such as preferred foods, appropriate texture, etc. The taste of the dishes that we present according to the person's sensitivities (spicy, salty, sweet, sour, bitter, etc.), will help raise the person's appetite and pleasure.

The visual sense plays an essential role in food. Taking care of the presentation of food, its arrangement on the plate, its colors, will help us motivate the person in the meal and contribute to the enjoyment of it.

The utensils used will also contribute to making the act of eating more pleasant. The plate, the cutlery, the glasses, must be appropriate to the capabilities of the person, but at the same time, they must be beautiful for the rhythm in the meal, the accompaniment that the person needs has to adapt to his state. Eating in a pleasant and pleasurable way is essential in the proper care of the person.

2.5 THE OLFACTORY SENSE: SMELLS AND AROMAS

The result of taste and olfactory sensory dysfunction in the person with AD is uncontrolled eating routines, loss of appetite, impaired swallowing (dysphagia), and unbalanced food preferences.

The olfactory function is important for sensory perception, helping to detect odors produced by spoiled food, dirty clothes and gas leaks, among others. If aging and Alzheimer's disease are accompanied by a decline in olfactory function, this could reduce the ability to detect these situations, jeopardizing the safety and hygiene of older people.

Smell deteriorates with aging (Hori et al., 2015). Loss of olfactory function begins between 50 and 60 years of age and deteriorates even more after 70 years. In addition, if Alzheimer's disease is added, this deterioration is even greater.

The sense of smell is a cognitive impairment diagnosed in very early stages of the disease. Although, the loss of olfactory capacity is an initial characteristic of the pathology, which begins with mild cognitive impairment it is not affected further through the later stages.
(Luzzi et al., 2007).

The well-being of the person with AD will be improved if we take care of the aromas that the person has around him. In general, it is recommended to take care of the smells of the rooms in which the person is. Ventilating the rooms will be essential, renewing the environment. It is recommended in the usual rooms and for the environmental aroma to be able to offer a fresh, relaxed atmosphere. It will always be important to be able to know the smells that have been and may be of pleasure and displeasure for the person, to try to respect it.

Some practical recommendations for the aromas and smells at home, could be:
- Essential oils:

- Lavender: Traditionally, lavender is said to be calming and to balance strong emotions. It is also antidepressant and used in cases of insomnia. Use it at night to improve sleep.
- Melissa: Another essential oil that has been studied in relation to Alzheimer's disease and dementia; helps calm and relax. It is useful for those who suffer from anxiety and insomnia.
- Mint: It is used both to stimulate the mind and to calm the nerves. It is said to rectify distraction. You can give it in the morning to energize the patient and stimulate appetite.

The use of essential oils is not the only way that a person with dementia can benefit from their sense of smell. The smell of fresh bread or cookies at home guarantees the activation of memories; such as the smoke from a campfire, the cherry blossoms in spring, a roast chicken, a special perfume or cologne...

Scented candles and incense are easy ways to fill your home with scents:
- Frankincense provides a strong aroma, so it is especially good if a person has a diminished sense of smell. Just be careful with candles and incense: don't leave a person with dementia alone with a burning flame.
- Other examples are scented soaps and lotions; the flowers that can and should be part of your decoration whenever possible.

2.6 TOUCH/ COMFORT

The sense of touch in the person with AD is one of the most important senses to be able to work and enhance the daily care.

In the person with AD, in general, the ability to perceive and process sensory information decreases. For example, in the palms of the hands and feet the ability to differentiate between the rough and the smooth is lost. The perception of pain is altered, so the person with AD can be injured, and not show external pain. It is difficult to feel temperature changes, so older adults are at greater risk of burns.

But the sense of touch is what offers us one of the greatest possibilities of being able to connect with the person. Touch can offer the person in care situations of daily life well-being and tranquility or also discomfort and irritability.

It is essential to know the preferences of the person in terms of tactile sensations: What temperature generates greater comfort?, Which parts of her/his body have greater sensitivity to tactile experiences?

The person with AD and high level of dependence, probably "has to be touched" in many situations of daily life. We must know, for example, what is the temperature of the water that pleases him the most, which textures generate greater acceptance, which parts of the body are more sensitive. Etc.

Daily care involves tactile sensations continuously. Offering them properly will be essential to the emotional well-being of the person.

Beyond daily care, the sense of touch must be present as an offer to the person of sensations, connection with the environment, communication and well-being.

We recommend that at different times of the day, interventions based on the sense of touch can be offered to the person from home, to generate awareness of their body. To offer her emotional responses, to be able to communicate with her.

Some possible simple activities from home, could be:
- Hand massage with cream or natural oils, with relaxing aroma.

- Tactile sensations with different textures contrasted in some parts of his/her body (always according to his/her acceptance): soft textures, rough textures, rough, .., always observing the response of the person.
- Contact with different temperatures in some parts of the body (e.g. hands and/or feet).

In this way we observe the responses of the person and we offer varied experiences that can contribute to their openness to sensations and will facilitate the answers (of pleasure or displeasure).

Comfort will be essential for the person: to offer pleasant textures in the clothes. Offer blankets and elements for the well-being with textures that are easy to accept.

The ambient temperature must be adapted to the person's preferences, in order to generate the best possible comfort. Having excessive heat or cold, will be a source of discomfort and discomfort for the person.

2.7 THE VESTIBULAR SENSE: MOVEMENT, POSTURAL CHANGES

It is probable that the person with AD needs postural changes. It could present a level of motor dependency that implied mobilizations that would generate vestibular information with certain continuity.

The vestibular system perceives the sensations coming from this movement. In cases of alteration it will generate feelings of discomfort in the person.

The vestibular system we see has great influence on postural muscles, postural control and stability.

The postural comfort of the person with AD will be essential. We must look well at their posture in different positions: lying down, sitting, and standing. In each situation offer, from home, all the elements and supports that contribute to their well-being, to feel comfortable: Adequate and adapted beds, comfortable pillows, adequate comfort armchairs, supports for their displacement that generate security and enhance their autonomy, etc.

It is important to observe the person and see how he responds to postural changes, transfers and displacements.

In this way, the caregiver must adapt to the rhythm of the person, offer calmly in the care activities, postural changes in an appropriate way.

If the person retains the ability to move, we must always accompany him by enhancing his autonomy.

Also offer during the day the possibility of experiencing vestibular sensations in a situation of comfort and security. For example: gentle swings on a rocker, quiet walks, and if possible and the person accepts it, walking on varied slopes, going up and down stairs, etc.

People with more advanced dementias, due to their limitations in information processing, may have different levels of disconnection with the environment which, in turn, could lead to the appearance of different behavioral disorders. Interventions based on multisensory stimulation are considered an effective method of increasing the involvement of participants with the environment, thus reducing the likelihood of the occurrence of such disorders.

People with dementia often show behavioral agitation and difficulties in expressing emotions. Some research on the application of Snoezelen's therapy shows that feelings of anxiety and tension can be reduced (Baker, Dowling, Wareing, Dawson and Assey (1997; Moriarty, 2002). Multisensory interventions take advantage of the residual sensorimotor capabilities of dementia patients and generate few attentional and intellectual demands on them (Baker, Dowling, Wareing, Dawson, and Assey 1997; Beatty, Zavadil, Bailly, Rixen, Zavadil, & Fisher, 1998; Buettner, 1999; Esperanza, 1998). There seems to be some consensus among the scientific community that sensory stimulation is an appropriate intervention method to enhance the quality of life of people with dementia, especially those whose impairment is more severe, and is the

first recommended intervention to reduce the psychological and behavioral symptoms of dementia. In addition, better results are obtained if the intervention and the stimuli used are adapted to the individual needs and preferences of the participants and if the level of stimulation is adjusted to avoid agitation caused by over- or under-stimulation. It seems accepted that as cognitive functions deteriorate due to the evolutionary course of a neurodegenerative disease, special care needs to be paid to the environment so that it is not seen as something threatening or confusing for these people who, in addition, only experience it at the sensory level. People with more severe cognitive impairments need a more structured and stimulating environment.

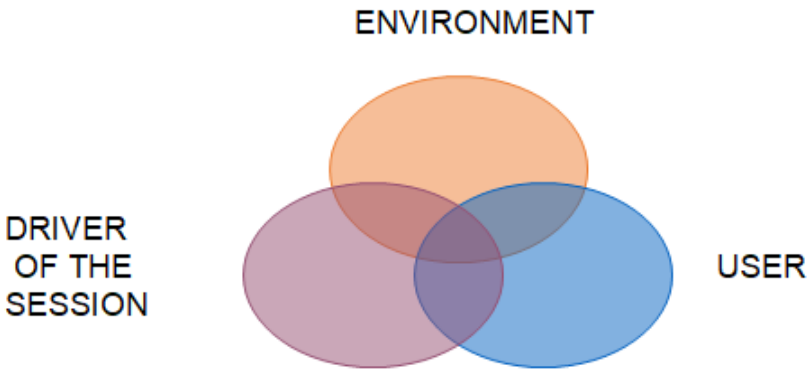
Incorporating the conceptual framework, MSE/Snoezelen is defined as a philosophy, a dynamic framework of intellectual property based on an ongoing sensitive relationship between the participant, the companion, and a controlled environment, where a multitude of sensory stimulation possibilities are offered.

Developed in the mid-1970s and practiced throughout the world, MSE/Snoezelen is guided by the ethical principles of enriching the quality of life. This shared approach has applications in leisure, therapy and education, taking place in a dedicated space suitable for all people, particularly those with special needs such as dementia and autism. Isna Board, Tranquil Waters, Alabama 2012.

The word Snoezelen is the combination of two Dutch terms. “Snuffeln”, which means to smell, in the sense of feeling the sensation generated by an external element to the person, and the term “doezelen”, which means to smile. Therefore, the concept snoezelen essentially means “GENERATING A STATE OF EMOTIONAL WELL-BEING FROM SENSORY INPUTS”.

The snoezelen concept assumes that the world we live in is a mixture of sensations of light, sounds, smells, tastes and varied tactile experiences. Sensations to which we have access from our sensory organs: ears, eyes, nose, mouth, skin. The snoezelen space has as one of its objectives to favor the use of these senses, facilitating the experience of rich and varied sensory experiences.

The snoezelen intervention is fundamental on the triangle resulting from the interrelationship between:



From the Snoezelen concept, and understanding that its essence implies generating emotional well-being for the person from sensations, it seems very obvious that the center of any intervention must be the person himself. Therefore, it is common for the person to mark the starting point for us, to be the main protagonist in a global Snoezelen intervention. We must know the person, obviously his medical history, but above all his life history, his tastes, his preferences, his difficulties. It is also essential to carry out a correct Sensory Assessment of the person.

The professional is a person, a person with certain characteristics. We must be very aware of the importance that how the professional is doing, how he is, how he feels, what his expectations are, his beliefs, his insecurities, etc., will have in any intervention, since all of this, more or less obviously, will condition the intervention.
The environment as a basic pillar of the Snoezelen concept, we understand it as the place where the relationship takes place. It is a specific space and time in which the person and the professional meet. The environment will be clearly decisive when it comes to deeply achieving the connection of the person with himself and with the other

2.8 SNOEZELEN 24 HOURS

Snoezelen 24 hours implies being aware that the day to day of the person, each moment, each activity, is a source of sensations. The caregiver of the person with AD, as we have explained previously, has to take care of the sensoriality at home, in care tasks, in activities, in the environments in which the person finds himself.

The effect that can be achieved in a Snoezelen Room or in a space specially designed for a snoezelen session is unique. The session is designed offering from the sensations a moment of well-being and peace for the person. But, it is essential to accompany the snoezelen session with a sensory-appropriate everyday life.

Numerous investigations show the fundamental effects of this 24-hour sleep intervention on the emotional well-being of the person with AD.

3. CONCLUSION

For the implementation of Snoezelen, it is important to create a pleasant and quiet atmosphere, where the person is comfortable, warm and the environment is lit well and a pleasant music is playing and there is a pleasant scent in the room and some tactile materials are offered to the person for entertainment and if applicable, a pleasant tactile massage is applied.

In doing so, it is crucial that a good mood is conveyed and the person's response time is respected. The leader of the session must have an open and flexible mind and a good knowledge of the person and the intervention techniques, to be able to pursue the interaction with the user and also be able to "provoke" a response.

Since the objectives of Snoezelen is offering an improvement of the individual's emotional wellness, it is fundamental that the session makes the individual feel at ease with the activity, so respecting the person's preferences without forcing him/her is vital.

Attention should be paid to not overstimulating the individual, to not offering strong sensory inputs that do not take into account the person's sensory profile.

Very frequently, people with AD have difficulties for communicating with their environment, they tend to be closed within themselves, Snoezelen session strengthens the link between the individual and the environment that surrounds him/her, offering the possibility of communication between the user and the caregiver, while the person is fostered to express his state, feelings, preferences, etc. by providing the individual with a state of relaxation.

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