

**BPSD-OT, "Occupational Prescription" Intervention for  
Behavioral and Psychological Symptoms of Dementia (BPSD-OT)  
in Patients' homes: Pilot Project**

**Orit Segev-Jacobovski**, Ph.D, lecturer, Ariel University, Clalit Health Services, Israel

**Carmit Perez**, MsC, Dan Petah Tikva district, Clalit Health Services, Israel

**Dikla Efrati-Chomsky**, MsC , Southern District, Clalit Health Services, Israel

**Tali Rapaport**, MsC, Haifa and Western Galilee district, Clalit Health Services, Israel

**Ariela Zur**, MsC, Chief occupational therapist, Clalit Health Services, Israel

**Yan Press**, M.D., Head Department of Geriatrics, Soroka University Medical Center,  
Ben-Gurion University Israel

**Boris Ponchak**, M.D., Head of Ambulatory Geriatric Services and Home Care Unit, Israel





## Introduction

Behavioral and Psychological Symptoms of Dementia (BPSD) can be hyperarousal, agitation, aggression, apathy, depression, psychotic symptoms, and disinhibition (Cerejeira et al., 2012; Gerlach & Kales, 2018).

BPSD causes distress to patients and caregivers, often leading to nursing home placement (Cibeira et al., 2012).

Programs are needed to help caregivers in caring for their family members to promote aging in place.

Clalit Health Services, in Israel, introduced a new non-pharmacological OT treatment within home care units to relieve the distress of dementia patients with BPSD and their families



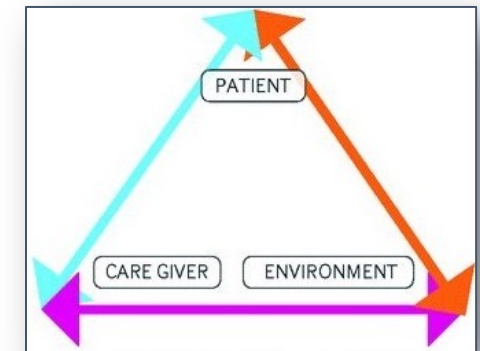
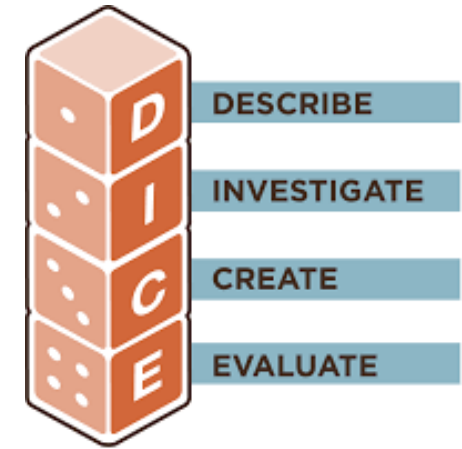
**BPSD - OT**



# BPSD-OT

## Theoretical basis:

- **The “DICE” Describe, Investigate, Create, and Evaluate** guiding the primary therapist/caregiver regarding ways to deal with behavioral disorders (Fraker et al., 2014; Kales et al., 2014)
- **The Tailored Activity Program (TAP)** - encouraging active and meaningful occupation through an **“Occupational Prescription”**, cognitive and communication strategies (Gitlin, Hodgson et al., 2010).
- **COPE Care of Persons with Dementia in their Environments** - reducing environmental stressors and strengthening the caregiver's skills (Gitlin, Winter et al., 2010)



# BPSD-OT

8 sessions, at homes with patients and caregivers



## The intervention includes:

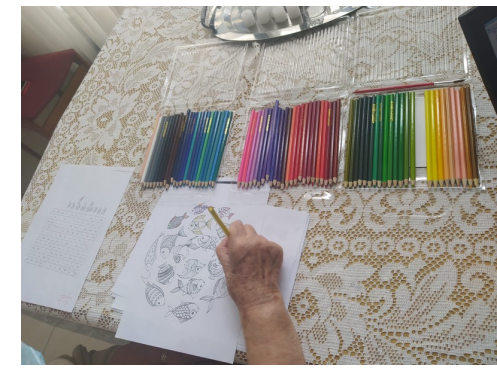
- Identifying meaningful activities.
- Adapting the level of mediation or assistance.
- Guiding the primary caregiver in effective communication and appropriate interaction.
- Ensuring a safe environment.
- Writing **“Occupational Prescription”** together with the caregiver: frequency, duration, how, when, environmental and human adaptations for enabling participation.





## Criteria for Selection of Activities

- Achieving the patient's cooperation.
- Patient is as active as possible.
- Activity does not have to be functional, productive, or logical.
- Activity suited to the abilities and preferences of the person or primary caregiver.
- Emphasis on enjoyment and positive experience.
- No focus on performance quality, except for ensuring patient safety.

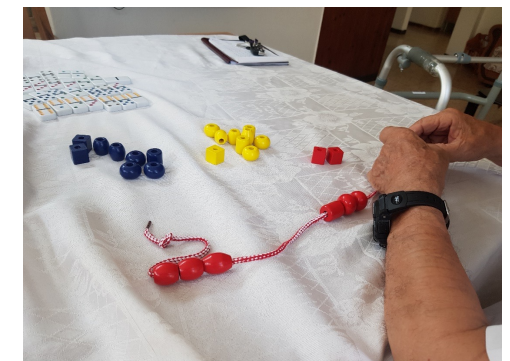


## Caregiver Training Includes

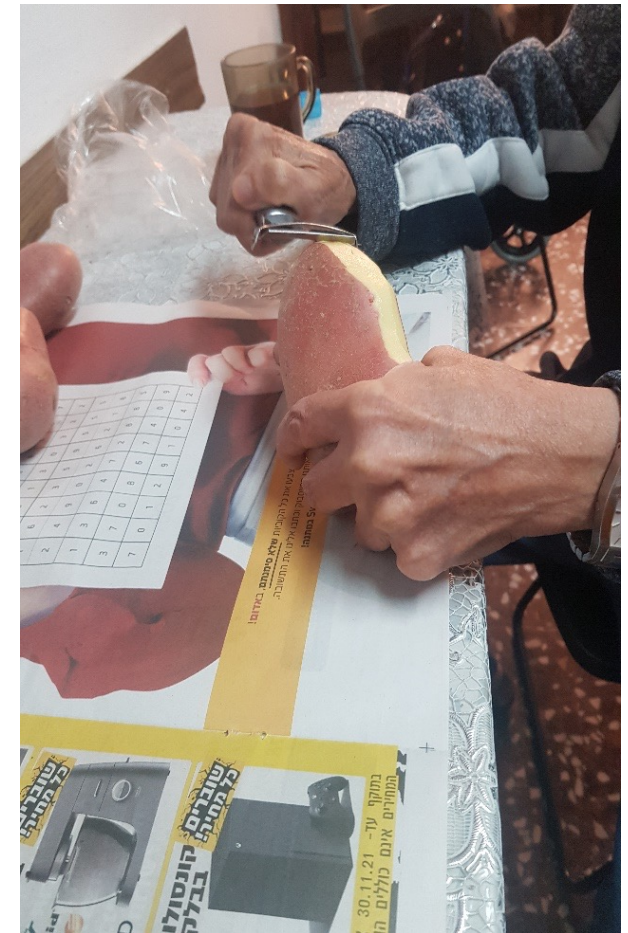
- Use of cognitive strategies, such as: providing cues, flexibility in rules, avoiding rushing the patient, and simplifying communication.
- Stress-reduction techniques before activity engagement.

## Outcome indicators

- Observed calmness, relaxation, and reduction in agitation.
- Primary caregiver is also calm and satisfied.



**Research aims:** To examine whether BPSD-OT intervention at home among people with dementia and BPSD reduces challenging behavioral symptoms and caregiver burden.



# Methods

**Design:** A retrospective longitudinal intervention study.

**Participants:** N=18

The participants were referred by family or geriatric physician for OT treatment in their homes due to dementia and behavioral disorders.

## **Inclusion criteria:**

- Dementia patients with one or more BPSD symptoms.
- Aged 65 and over, living in their own homes.
- A primary caregiver was an active partner in the therapeutic intervention process.
- Insured by Clalit Health Services in the Dan-Petah Tikva district.

## **Exclusion criteria:**

- Dementia without BPSD.
- Behavioral disorders without dementia.
- The caregiver is not an active partner for their own reasons.

Approval for data extraction from the medical director has been obtained

# Procedure

## Before and after proxy report 3 questionnaire:

- 1. Neuropsychiatric Inventory (NPI):** assessing the patient's challenging behaviors (BPSD) relating to severity and frequency (Cummings et al., 1994, 1997).
- 2. Zarit Caregiver Burden Assessment:** assessing the caregiver's distress (Zarit et al., 1980).
- 3. Occupational Questionnaire:** a person's daily activities from 5:00 to 23:00 (Smith et al., 1986).

<b>BPSD Patients (n=18)</b>			
	<b>Mean</b>	<b>S.E</b>	<b>Range</b>
<b>Age</b>	<b>80.06</b>	<b>6.23</b>	<b>66-92</b>
<b>FIM COG</b>	<b>14.33</b>	<b>7.07</b>	<b>8-24</b>
<b>Men 50%</b>			
<b>Falls last 6 months 55.5%</b>			
<b>Married 72.2%, widow 27.8%</b>			
<b>Living with: spouse 50%, spouse &amp; foreign caregiver 22.2%, foreign caregiver 16.7%</b>			

<b>BPSD caregiver (n=18)</b>			
	<b>Mean</b>	<b>S.E</b>	<b>Range</b>
<b>Age</b>	<b>68.31</b>	<b>11.87</b>	<b>47-86</b>
<b>Education (years)</b>	<b>11.50</b>	<b>4.53</b>	<b>0-20</b>
<b>Family visits during the week</b>	<b>5.67</b>	<b>4.45</b>	<b>0-20</b>
<b>Men 33.3%, women 66.7%</b>			
<b>Married + 83.4%, 5.6%, divorced 11.1%, single 5.6%</b>			

# Results - Paired t-tests for difference between the two points in time.



	Bofore			After			t	P
	mean	S.E	Range	mean	S.E	Range		
<b>Neuropsychiatric Inventory, 0-144</b>	48.00	20.85	13-81	35.50	15.46	12-67	2.419*	<b>0.027</b>
<b>Zarit Caregiver Burden, 0-48</b>	18.67	11.95	0-43	17.29	8.38	0-30	1.152	0.266
<b>Item 5: Do you feel strained when you are around your relative?, 0-4</b>	2.72	1.71	1-5	1.82	1.07	1-4	2.554*	<b>0.021</b>
<b>Occupational Questionnaire</b>								
<b>BADL %</b>	<b>23.97</b>	6.04	10.53-31.58	<b>21.39</b>	7.5	10.53-42.11	1.409	.178
<b>Everyday Task %</b>	<b>2.63</b>	6.04	0-21.05	<b>5.60</b>	8.02	0-26.32	-2.051	.057
<b>Recreation %</b>	<b>28.36</b>	12.12	0-42.11	<b>27.02</b>	10.34	5.26-47.37	.626	.540
<b>Rest %</b>	<b>14.91</b>	11.87	0-42.11	<b>12.45</b>	9.36	0-26.32	.692	.499
<b>Sleep %</b>	<b>30.11</b>	13.36	10.53-57.89	<b>33.52</b>	16.07	15.79-84.21	-1.012	.327

## Conclusion

- Non-pharmacological BPSD-OT treatment can relieve BPSD.
- BPSD-OT helps reduce strained feelings among caregivers.

## Clinical Implications

- OT are experts in providing a personal "Occupational Prescription" for active engagement in activities.



## limitations

- Preliminary results
- Controlled research is recommended to evaluate the intervention.

Thank you to the participants and their families,

To the occupational therapists who carried out the intervention,

Thank you for listening.

[oritsj@ariel.ac.il](mailto:oritsj@ariel.ac.il)