

## Case Report

# Improvement of Behavioral and Psychological Symptoms of Dementia (BPSD) by Comprehensive Standardized Care Methodology

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**Abstract**

**Introduction:** Dementia is a progressive, incurable illness, and behavioral and psychological symptoms of dementia (BPSD) can cause tremendous distress for both patient and caregiver, especially increase the burden of care.

**Case Description:** A French origin comprehensive standardized care methodology, Humanitude®, focuses on verbal and non-verbal communications with 4 prerequisite techniques; gaze, speech, touch and support to upright position. All the care is to be applied in the concrete sequence contains 5 steps with these techniques. This methodology was implemented to 2 advanced Alzheimer's disease patients in a long-term care facility. BPSD of both patients were evaluated by the Behavioral Pathology in Alzheimer's disease Rating Scale (BEHAVE-AD). Before implementation of the methodology, BEHAVE-AD of both patients was 9. After the intensive training of the methodology to the nursing staff, BPSD was evaluated in the month 1 and the month 3. The BEHAVE-AD of the first patient was from 9 to 2 in the month 1 and 2 in the month 3 the second patient was from 9 to 0 and 1, respectively.

**Conclusion:** The comprehensive standardized 4 dimensional care methodology improved BPSD for advanced Alzheimer's disease patients.

**Keywords:** Alzheimer's disease; Behavioral and psychological symptoms of dementia; Non-pharmacological intervention; Humanitude

## Introduction

Dementia is a progressive, incurable illness [1]. Integral to dementia is a broad spectrum of behavioral manifestations including agitative and disruptive behaviors [2,3].

Behavioral and psychological symptoms of dementia (BPSD) can cause tremendous distress for both patient and caregiver, especially increase the burden of care [3,4].

Many non-pharmacological interventions are tried for BPSD managements, however, majority of these interventions require particular time to perform [5] and agreement by the patient is crucial. In the facilities for the vulnerable elderlies with dementia, it is needed effective methodology to deliver high quality care to the patients even with BPSD.

Humanitude® is a French origin comprehensive, standardized care methodology focusing on verbal and non-verbal communications with the concrete sequence of care techniques. We have experienced significant improvement of BPSD for advanced Alzheimer's disease patients by providing the daily care with this methodology.

## Case Presentation 1

98 years old Japanese woman with advanced Alzheimer's dementia had been institutionalized in a long term care facility. Her Mini-Mental State Examination (MMSE) score was 0 and

there was no acute or chronic medical problem beside dementia. It was difficult to provide daily care because of her disruptive BPSD, including spitting, biting or hitting the nursing staff. The scoring of her Behavioral pathology in Alzheimer's disease rating scale (BEHAVE-AD) was 9. All 18 nursing staff who worked in the ward had standardized intensive training course of the comprehensive care methodology, Humanitude®, and continued to provide the care based on the methodology. One month later after the training, her BPSD was decreased with BEHAVE-AD score from 9 to 2. In the follow up for 3 months, the score remained 2. Sub-categorical analysis showed major reduction of the BEHAVE-AD scoring dimension was the aggressiveness. With narrative analysis of nursing staff, 83% of caregiver described that the patient's aggressive behavior toward to nursing staff was markedly decreased.

## Case Presentation 2

89 years old Japanese woman with advanced dementia was also admitted to the same facility of case 1. Her MMSE score was 10 and medically she was stable. The challenge for this patient was refusal of the daily care and wandering. Her BEHAVE-AD assessment was 9. All the nursing staff for this patient also had training of Humanitude® and continued to provide the standardized care based on the methodology. One month later after the training, her BPSD was improved and BEHAVE-AD score decreased to 0. In the follow-up of the month 3, the score was 1. In the sub-categorical analysis,

paranoid and delusional ideation was major change of her BEHAVE-AD scoring. In the narrative analysis of the nursing staff, 33% of the nursing staff described the decrease of her agitation and wandering, improvement of verbal and non-verbal communications with the patient.

## Discussion

BPSD in both of advanced dementia patients showed significant improvement by implementation of the comprehensive standardized care methodology. This methodology focuses on the interpersonal communications by 4 prerequisites; gaze, speech, touch and support to upright position. These 4 dimensions are to be applied comprehensively all through the patients' care. Also every care is to be performed in a sequence of 5 steps; introduction, agreement, harmonized care with verbal and non-verbal communication, emotional consolidation, and appointment for the next care, respectively [6,7]. The nursing staff of the long-term care facility had training of this methodology followed by short bedside training.

The progressively lowered stress threshold (PLST) model shows that person with Alzheimer's disease becomes less able to receive and process stimuli and information. This causes concomitant progressive decline in the stress threshold, which relies heavily on intact cerebral function [8]. A research had shown the day shift had the highest incidence of aggressive behaviors [9], and content analysis of the descriptions of events prior to the behavior revealed that the 72.3% involved a response to touch or invasion of personal space that occurred as part of care giving [10].

The patients who received the 4 dimensional comprehensive cares became less agitative and their BPSD were improved. It is considered that this methodology increases the tolerance of the stress, which is caused by care for Alzheimer's disease patients, and allowed them to accept the care. Knowing that relationships between exposure to aggressive behaviors and work outcomes is fully mediated by the appraisal of staff member's distress [11], the change of behavior of advanced Alzheimer's disease patients will cause the favorable response to the nursing staff and can lead to prevent

frequent turnover of the staff. In this context, this methodology is useful for both patients and caregivers. The further study to assess the effectiveness of this care methodology is needed for the rapid aging societies.

## Conclusion

The comprehensive standardized 4 dimensional care methodology improved BPSD for advanced Alzheimer's disease patients.

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