

## ART THERAPY MAY BE BENEFICIAL FOR REDUCING STRESS - RELATED BEHAVIOURS IN PEOPLE WITH DEMENTIA - Case report

Ninoslav Mimica & Dubravka Kalinić

University Department, Vrapče Psychiatric Hospital, Zagreb, Croatia  
School of Medicine, University of Zagreb, Zagreb, Croatia

### SUMMARY

*Communication with person with dementia (PWD) is becoming worse and worse during the course of illness, and at the end may be totally lost. Non-pharmacological interventions may be beneficial in increasing the behavioural disturbances which appears frequently during the progression of dementia, and combination of non-pharmacological techniques and drugs is usually more efficacy than psychopharmacs alone. Mr. Zvonko, the PWD diagnosed with Alzheimer's disease of moderate stage, is presented in this case report. Although Mr. Zvonko was treated with antidementia drugs, the behavioural disturbances were present. The introduction of low doses of conventional antipsychotic was accompanied with extrapyramidal side-effects, and atypical antipsychotics were not used due to the FDA warning and non-willingness of caregiver and family to take that risk. After his individual and family status was evaluated, he was advised to attend the daily care centre and to start with art therapy. Despite he was never drawing pictures before developing AD, everybody, including his wife who is also a caregiver, was surprised with his talent and creativity. While drawing the pictures he was calm and satisfied and his behaviour in the daily care centre, but also at home, became much more adequate. There was no need to add psychopharmacs for behavioural disturbances. In this case the art therapy was shown to be an excellent add-on non-pharmacological intervention, beneficial for reducing stress-related behaviours in PWD taking antidementia drugs.*

**Key words:** Alzheimer's disease - antidementia drugs - art therapy - communication - dementia

\* \* \* \* \*

### INTRODUCTION

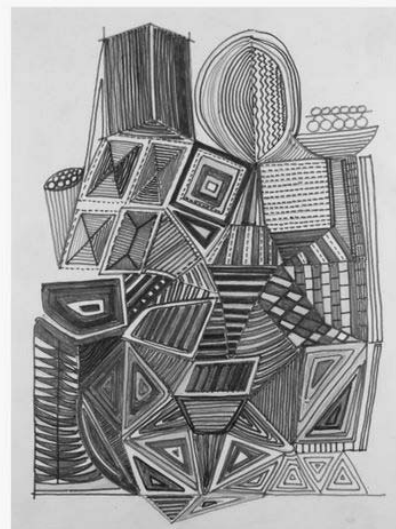
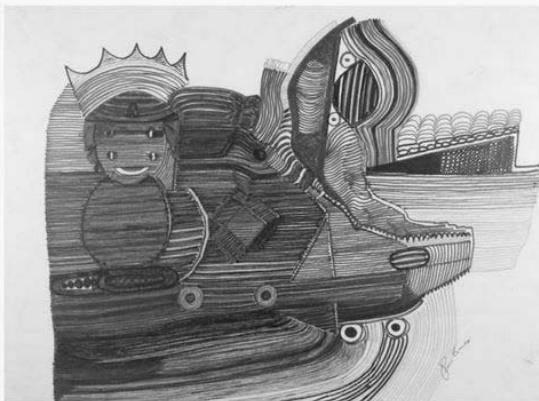
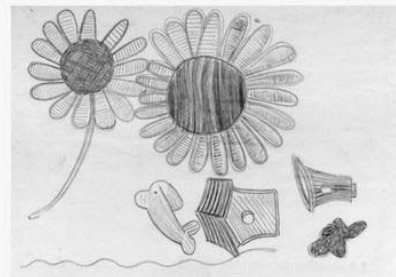
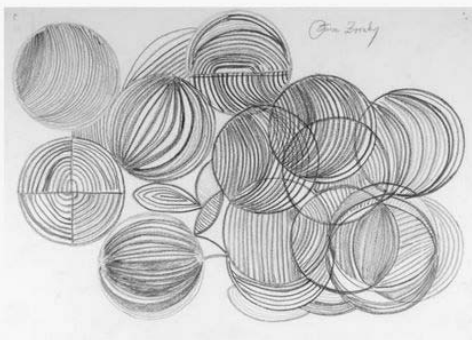
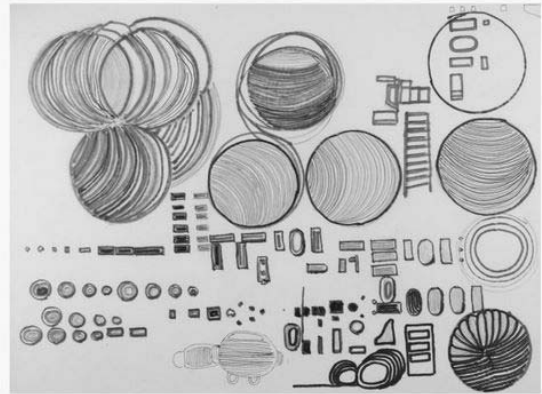
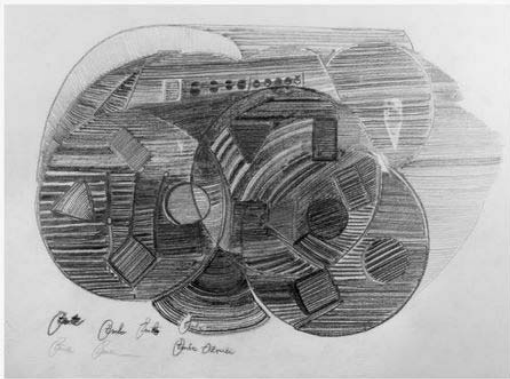
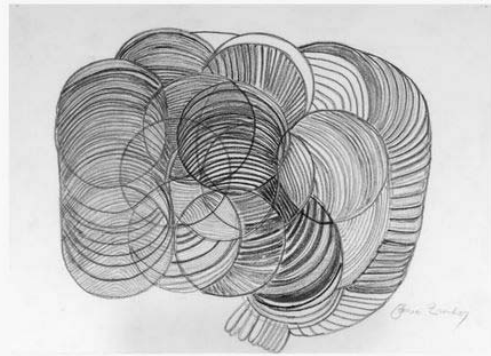
There is a lot of evidence that non-pharmacological interventions can improve quality of life in person with dementia (PWD) (Ayalon et al. 2006, Cohen-Mansfield et al. 2007, Kong et al. 2009). There is also some evidence that art therapy can be beneficial for PWD (Basting & Killick 2003, Bell & Troxel 2006, Bell et al. 2007, Cayton et al. 2008, Midorikawa et al. 2008, Lee 2009). Some data show that participation in art therapy groups effects significant positive changes in mood and cognition both immediately within sessions and later outside the sessions having impact on behaviour in the day care/residential care setting (Rusted 2006, Bonner 2006). Using nonpharmacological interventions as an add-on therapy we can possible avoid some side-effects of antidementia drugs (Mimica & Presečki 2009, Mimica & Presečki 2010a, Mimica & Presečki 2010b).

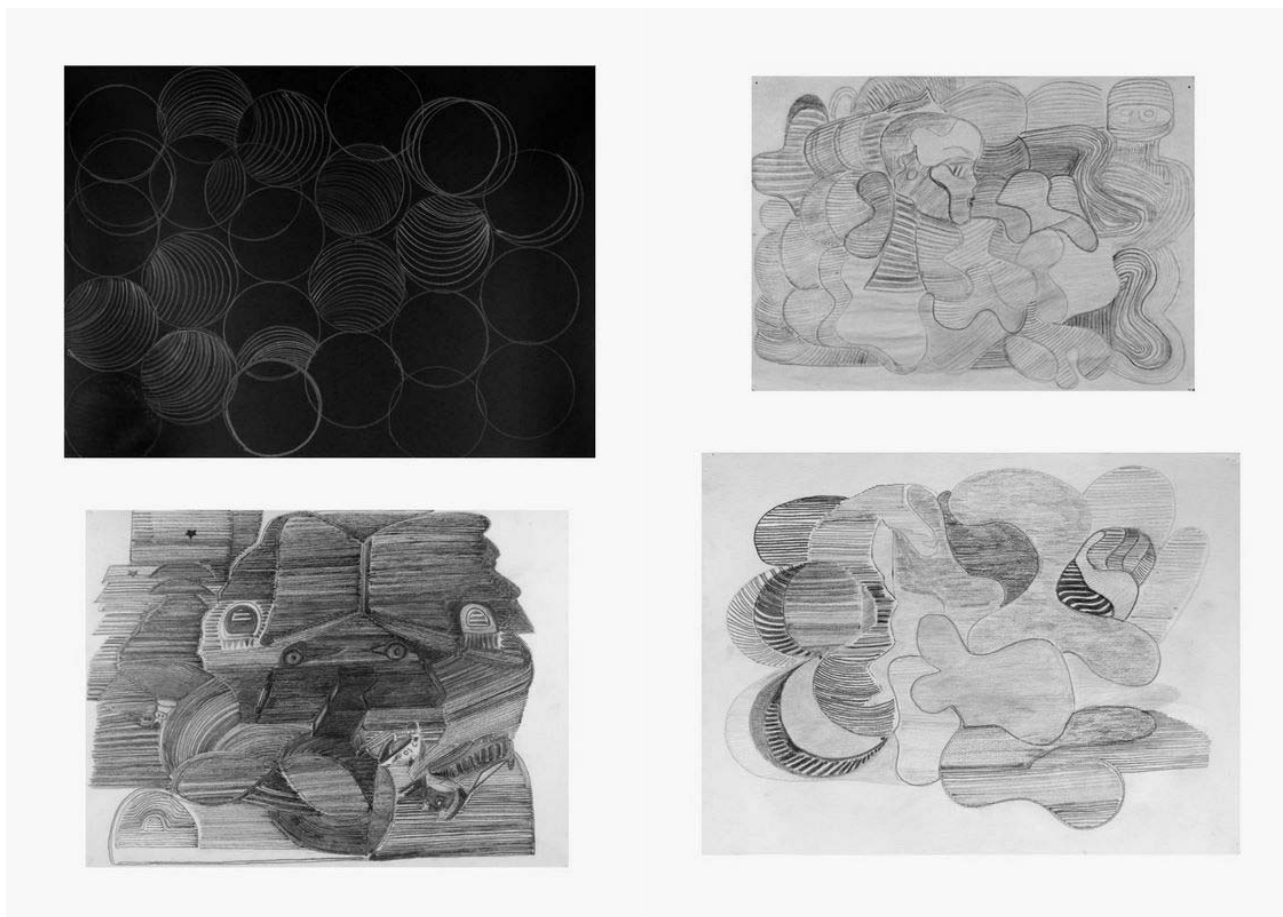
### CASE REPORT

Mr. Zvonko, a person with Alzheimer's disease (AD) who was involved in art therapy while attending the daily care centre for PWD.

Alzheimer Disease Societies Croatia (ADSC) which is located in Zagreb, capital of Croatia, is running the Counseling centre from its foundation since 1999 (Mimica et al. 2006a, Mimica et al. 2006b). We have monthly meetings for families of PWD and all other interested ([www.alzheimer.hr](http://www.alzheimer.hr)). The caregiver (wife)

and Mr. Zvonko, who was diagnosed with Alzheimer's dementia of moderate stage, came one day to Counselling centre (Mimica 2007). He was already on standard pharmacological treatment with antidementia drugs but behavioural disturbances were present (Folnegović-Šmalc et al. 2006, Vuksan-Ćusa et al. 2007, Mimica 2009). The introduction of low doses of conventional antipsychotic was accompanied with extra-pyramidal side-effects, and atypical antipsychotics were not used due to the FDA warning and non-willingness of caregiver and family to take that risk. After his individual and family status were evaluated, he was advised to attend the daily care centre in Nursing home for older and incapable people "Medveščak", in Zagreb. This daily care centre, which has longest experience with rehabilitation of PWD in Croatia, is located in the centre of the town, and the transportation for PWD is provided (Mimica et al. 2006c, Mimica et al. 2009). They are equipped with occupational therapists that are providing a person-centred rehabilitation. So, they have agreed that for Mr. Zvonko, who was technician - art therapy may be appropriate (Mimica et al. 2010). Although he was never drawing pictures before developing AD, everybody, including his wife, was surprised with his talent and creativity (Figures 1-12). While drawing the pictures he was calm and satisfied and his behaviour in the daily care centre, but also at home, became much more adequate, and complete communication was improved (Mimica 2011).





Figures 1-12. Drawings of person with dementia performed during art therapy in daily care centre

## CONCLUSIONS

Art therapy, as an add-on non-pharmacological intervention, can improve the quality of life of PWD and their caregivers, but also be beneficial for communication and reducing stress-related behaviours e. g. behavioural disturbances in PWD taking anti-dementia drugs.

## REFERENCES

1. Ayalon L, Gum AM, Feliciano L, Arean PA: Effectiveness of nonpharmacological interventions for the management of neuropsychiatric symptoms in patients with dementia: a systematic review. *Arch Intern Med* 2006;166:2182-8.
2. Basting AD, Killick J: *The arts and dementia care: A resource guide*, Brooklyn, The National Centre for Creative Aging, 2003.
3. Bell V, Troxel D: *The best friends approach to Alzheimer's care, revised*, Baltimore, Health Professions Press, 2006, pp 140-1.
4. Bell V, Troxel D, Cox T, Hamon R: *The best friends book of Alzheimer's activities, volume one*, Baltimore, Health Professions Press, 2007, pp 195.
5. Bonner C: *Reducing stress-related behaviours in people with dementia - care-based therapy. Second impression*, London, Jessica Kingsley Publishers, 2006.
6. Cayton H, Graham N, Warner J: *Alzheimer's and other dementias: Answers at your fingertips, third edition*, London, Class Publishing, 2008, pp 122.
7. Cohen-Mansfield J, Libin A, Marx MS: Nonpharmacological treatment of agitation: a controlled trial of systematic individualized intervention. *J Gerontol A Biol Sci Med Sci* 2007;62:908-16.
8. Folnegović-Šmalc V, Mimica N, Makarić G, Varda R, Silić A: Croatian therapeutic algorithm for treatment of Alzheimer's disease. *Neurol Croat* 2006;55(Suppl 4):38.
9. Kong EH, Evans LK, Guevara JP: Nonpharmacological intervention for agitation in dementia: a systematic review and meta-analysis. *Aging Ment Health* 2009;13:512-20.
10. Lee H: *The arts in dementia, Programme and Abstracts Handbook of 24th Conference of Alzheimer's Disease International (ADI), March 25-28, 2009, Singapore, ADI & ADA, 2009, pp 31.*
11. Midorikawa A, Fukutake T, Kawamura M: Dementia and painting in patients from different cultural backgrounds. *Eur Neurol* 2008;60:224-9.
12. Mimica N: Contemporary treatment and care for people with Alzheimer's disease and Croatian reality. *Period Biol* 2007;109(Suppl 2):42.
13. Mimica N: Komunikacija s osobom oboljelom od demencije. *Medix* 2011;17:(92, Suppl 1):56-8.
14. Mimica N: The cholinesterase inhibitors - current clinical view and Croatian reality, Programme and Abstracts of 10th International Meeting on Cholinesterases, 20-25 September 2009, Šibenik, Croatia, 2009, pp 73-4.

15. Mimica N, Dajčić M, Ivanković V, Pecotić Z, Šimić G, Kačanski Vidas A et al.: Alzheimer Disease Societies Croatia, Abstracts of 22nd Conference of Alzheimer's Disease International, 12-14 October 2006, Berlin, Germany, 2006a, pp 102-3.
16. Mimica N, Dajčić M, Ivanković V, Pecotić Z, Šimić G, Vidas A: Hrvatska udruga za Alzheimerovu bolest. *Lijec Vjesn* 2006b;128(Suppl 1):170-1.
17. Mimica N, Glamuzina K, Vučić K, Gatin M, Dajčić M, Dajčić T et al.: Art therapy for people with dementia - case report, Programme and Abstract Booklet of 25th International Conference of Alzheimer's Disease International (ADI), 10-13 March 2010, Thessaloniki, Greece, ADI & GAADR, 2010, pp 109.
18. Mimica N, Glamuzina K, Vucic K, Gatin M, Dajcic M, Dajcic T et al.: Art therapy for people with dementia - case report. In: Tsolaki M (ed) 25th International Conference of Alzheimer's Disease International, 10-13 March 2010, Thessaloniki, Greece, Medimond International Proceedings, 2010, pp 95-9.
19. Mimica N, Presečki P: Side effects of approved anti-dementives. *Psychiatr Danub* 2009;21(Suppl 1):108-13.
20. Mimica N, Presečki P: Current treatment options for people with Alzheimer's disease in Croatia, *Chem Biol Interact* 2010a;187(Nos. 1-3): 409-10.
21. Mimica N, Presečki P: How do we treat people with dementia in Croatia, *Psychiatr Danub* 2010b;22:363-6.
22. Mimica N, Šimić G, Dajčić M, Mladinov M, Treščec-Ivičić M, Novy-Radonić E, et al.: Alzheimer's disease and stigma fight in Croatia, Programme and Abstracts Handbook of 24th Conference of Alzheimer's Disease International (ADI), March 25-28, 2009, Singapore, ADI & ADA, 2009, pp 68.
23. Mimica N, Šimić G, Grbić K, Novy-Radonić E, Ivanković V, Dajčić M, et al.: Raising awareness of Alzheimer's dementia. *Clin Neuropathol* 25(Suppl 6), 303-304, 2006c.
24. Rusted J: A multi-centre randomized control group trial on the use of art therapy for older people with dementia. *Group Analysis* 2006;39:517-36.
25. Vuksan-Čusa B, Jakovljević M, Mimica N, Šagud M, Sartorius N: Algorithms for pharmacotherapy of dementia. *Psychiatr Danub* 2007;19:382-3.
26. [www.alzheimer.hr](http://www.alzheimer.hr)

### Acknowledgement

The authors of this paper express their gratitude to Mr. Zvonko and his family for giving us permission to present the case and publish the drawings.

### Disclosure of interest

The authors declare that there are no conflicts of interest.

### Correspondence:

Assist. Professor Ninoslav Mimica, MD, DSc  
Psychiatric Hospital Vrapče  
Bolnička cesta 32, HR-10090 Zagreb, Croatia  
E-mail: [ninoslav.mimica@bolnica-vrapce.hr](mailto:ninoslav.mimica@bolnica-vrapce.hr)