

# Use of opioids at the end of life in adults with advanced dementia in Finland

**Dimitrije Jakovljević MD, PhD**

Helsinki Health Center, Home Care Services, Helsinki  
Attendo Terveyspalvelut Oy



# CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report

## Background

- Most dementias are inevitably progressive
- Recognizing its terminal stage is the basis in planning the adequate palliative care.
- Pain is believed to be undertreated in the elderly especially among patient with dementia.
- Opioids are the medication of choice for pain management.
- Patients with dementia are more likely to receive opioids for other indications such as end-of-life treatment.

## Study objective:

- to analyze 3-year trends of analgetic use among residents with end-stage -dementia, in long-term care facilities, in Finland
- to investigate if use of opioids among this population differs between Helsinki and other big municipalities in year 2016

- There are three types of **long-term care facilities** in Finland:
  - health center wards
  - residential homes
  - Intensified nursing homes
- Collected data from long-term care facilities was extracted from the Resident Assessment Instrument (RAI)-database held by the National Institute for Health and Welfare, in Finland.

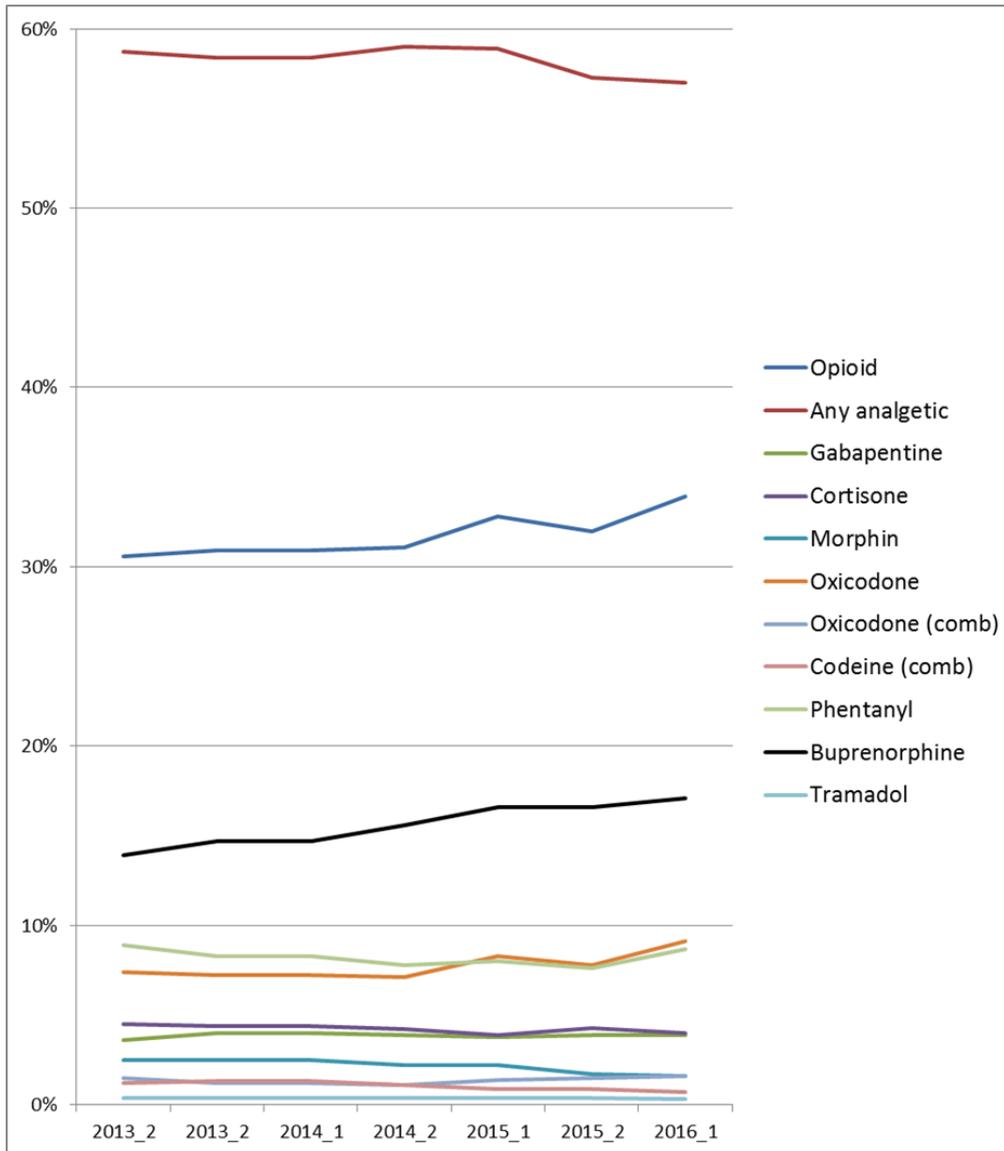
- The RAI-system is a tool for both planning of individual care (goal setting), and measuring quality and efficiency of care units.
- The RAI-system establishes a web-based benchmarking database for facilities to compare quality and cost of care (to learn from best practice).
- The quality of care is assessed by 27 clinical quality indicators.

### **Statistical analysis**

- Chi-squares and logistic multivariation tests.

## Results

- The total number of the assessments in this sample was 23,454
- 3,776 originated from Helsinki
- 10,703 from cities with University and/or regional hospitals,
- 8,975 from rest of Finland.
- Most residents were female 76%.
- Mean age of the residents in the study was 84 year.



## Distribution of analgetics

	Helsinki		Other big municipality		p<0,05
	n	%	n	%	
Service home	309	64,11	888	54,71	<.0003
Residential home	167	34,65	551	33,95	<.7766
Health centre	6	1,24	184	11,34	<.0001
Male	89	18,46	424	26,12	<.0006
Female	393	81,54	1199	73,88	<.0006
Age 65-79	118	24,48	407	25,07	<.7907
Age 80-90	232	48,13	854	52,62	<.0836
Age 90+	132	27,39	362	22,3	<.0208
Any cancer *	36	7,47	130	8,01	<.6988
Daily pain	196	40,66	840	51,76	<.0001
Any analgesic	226	46,89	934	57,55	<.0001
Any opioid	188	39	669	41,22	<.3846
Morphin	15	3,11	29	179	<.0741
Oxycodone	44	9,13	196	12,08	<.0738
Phentanyl	59	12,24	169	10,41	<.2569
Buprenorphine	92	19,09	339	20,89	<.3898
Paracetamol	219	45,44	886	54,59	<.0004

## All opioids

Effect	Point Estimate	95% Wald	
		Confidence Limits	
Helsinki	1,026	0,825	1,277
Daily pain	3,372	2,695	4,22
Cancer	1,549	1,109	2,162
Age 90+	1,309	1,056	1,623
Female	1,261	1,014	1,569
Service house	0,499	0,414	0,601

## Morphine

Effect	Point Estimate	95% Wald	
		Confidence Limits	
Helsinki	2,251	1,169	4,334
Daily pain	3,538	1,881	6,653
Cancer	1,743	0,663	4,586
Age 90+	1,589	0,828	3,049
Female	1,697	0,734	3,92
Service house	0,147	0,069	0,312

## Buprenorphine

Effect	Point Estimate	95% Wald	
		Confidence Limits	
Helsinki	0,967	0,744	1,257
Daily pain	2,212	1,739	2,815
Cancer	1,448	1,001	2,095
Age 90+	1,163	0,904	1,495
Female	1,05	0,812	1,358
Service house	0,728	0,586	0,906

## Conclusions

- This is the first study to investigate use of opioids residents with terminal stage of dementia, in long-term care facilities.
- Patients in Helsinki with dementia despite observed more pain were more likely to receive lower doses opioids compared to those in other parts of Finland.
- However, the lowest percentage of use was found among intensified nursing home residents.
- There are clear differences in treatment of patients with dementia at the end of life between Helsinki and other parts of Finland.
- The RAI might be an useful tool in advance care planning

# Acknowledge

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**Thank you for  
your attention**

ANY  
QUESTIONS  
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