A comparative analysis of prescriptions within the last 24 hours of life on a palliative care wards in Japan and England

Yuko Yoshida[1*], Etsuko Uejima[1], Yoshiaki Okamoto[2], Andrew Dickman[3]
[1]Department of Clinical Pharmacy Research and Education, Graduate School of pharmaceutical Sciences, Osaka University, Japan
[2]Ashiya Municipal Hospital, Japan
[3]Academic Palliative and End of Life Care Department Royal Liverpool University Hospital, Uk

1. Background

Optimising the prescriptions of palliative care patients and reducing polypharmacy are important issues in medicines management.

2. Aim

The aim of this pilot study was to identify medications that were prescribed and administered within the last 24 hours of a patient's life on palliative care wards and to investigate the differences between Japan and England.

3. Result

We examined 67 patients who died at the Ashiya Municipal Hospital in Japan from February to May in 2019, and 61 patients who died at the Royal Liverpool Hospital in England from February to April in 2019.

	Japan (N=67)	England (N=61)
Gender	Male 30, female 37	Male 34, female 27
Age (years)	77.5 ± 12.7	79.9 ± 11.0
Disease Cancer	Cancer 67, non-cancer 0	Cancer 24, non-cancer 37
Hospitalization	23.6 ± 27.0	17.2 ± 13.8

4. Result

Drug administered in the last 24 hours of death at the Ashiya Municipal Hospital in Japan(N=161), and at the Royal Liverpool University Hospital in England(N=269).

Japan (N=161)		England (N=269)	
Midazolam	24 (14.9%)	Midazolam	21 (7.8%)
Morphine	18 (11.2%)	Artificial saliva products	18 (6.7%)
Betamethasone	18 (11.2%)	Enoxaparin	15 (5.6%)
Haloperidol	11 (6.8%)	Paracetamol	14 (5.2%)
Hydromorphone	11 (6.8%)	Morphine	14 (5.2%)
Nutritional products	8 (5.0%)	Glycopyrronium	11 (4.1%)
Fentanyl	7 (4.3%)	Alfentanil	10 (3.7%)
Paracetamol	7 (4.3%)	Oxycodone	10 (3.7%)
Oxycodone	6 (3.7%)	Nutritional products	9 (3.3%)
Omeprazole	6 (3.7%)	Salbutamol	8 (3.0%)

5. Result

Top-5 potentially unnecessary administered drugs in the last 24 hours at the Ashiya Municipal Hospital in Japan(n=32), and at the Royal Liverpool University Hospital in England(n=69).

Japan (n=32)		England (n=69)	
Nutritional products	8 (25.0%)	Enoxaparin	15 (21.7%)
Omeprazole	6 (18.8%)	Nutritional products	9 (13.0%)
Lansoprazole	4 (12.5%)	Bisoprolol	4 (5.8%)
Furosemide	3 (9.4%)	Lansoprazole	3 (4.3%)
Famotidine	2 (6.3%)	Omeprazole	3 (4.3%)

6. Conclusion

◇ Nutritional products and Proton Pump inhibiter (PPI) were continuously administered until time of death in both countries.

◇ The low-molecular weight heparin, enoxaparin, was the most frequently administered potentially unnecessary drug in the last 24 hours in England.

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* Freelance Pharmacist, Osaka.