Palliative Sedation: Past, Present & Future

Robert Twycross
October 2016
Symptom Prevalence and Control During Cancer Patients’ Last Days of Life

VITTORIO VENTAFRIDDA, CARLA RIPAMONTI, FRANCO DE CONNO, MARCELLO TAMBURINI, Division of Pain Therapy and Palliative Care, National Cancer Institute, Milan, Italy, and BARRIE R. CASSILETH, Cancer Center, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania, USA

Journal of Palliative Care 1990; 6 (3):7-11

- Home Palliative Care Team
- prospective study
- 63/120 patients → unendurable symptoms
- ‘appeared on average two days before death’
- ‘controllable only by sedation-inducing sleep’
Sedation at end of life

Papavasiliou et al. 2013. Continuous sedation until death: mapping the literature... JPSM 45: 1073-82.
Palliative sedation [in the dying]

The use of specific sedative medications to relieve intolerable suffering from refractory symptoms by a reduction in patient consciousness.


The monitored use of medications intended to induce a state of decreased or absent awareness (unconsciousness) in order to relieve the burden of otherwise intractable suffering.

Krishna et al. 2012. Cancer patients in Singapore

- retrospective review of last 48h before death
- n = 238: <25% → midazolam and/or haloperidol
- almost all = low doses [median = 5mg and 4mg/day]
- two patients → coma: midazolam 8-10mg/24h

Author [personal communication]:
‘… none met the basic criteria for PS/CDS.’
Vitetta et al 2005. hospice patients in Australia
• retrospective review of sedatives prescribed ‘at some point in the last week of life’
• n = 102: 68% received regular sedatives
• ‘sublingual lorazepam tablets and clonazepam drops were commonly used and efficacious.’
Dutch Guideline

‘Palliative sedation’ refers not only to continuous deep sedation, but also to temporary, intermittent and/or superficial forms of sedation.

Royal Dutch Medical Association (KNMG) 2009
Types of ‘Palliative Sedation’

- primary vs. secondary
- light vs. deep
- intermittent (respite) vs. continuous
- progressive (proportionate) vs. sudden (emergency)
- physical vs. existential distress
Types of Sedation

Continuous and deep sedation (CDS) until death is contentious because:

• it ends ‘biographical’ or social life
• unless of relatively short duration, it will inevitably have a life-shortening effect
• there is uncertainty about effectiveness because unresponsiveness may not = unawareness
Consensus among PS Guidelines

- terminal illness; death imminent
- symptom(s) refractory to aggressive interventions or with no feasible further options
- the intention is symptom relief
- obtain informed consent from patient (if possible) or family/surrogate
- need agreed by healthcare team, ideally including experienced PC specialist
- documentation of consent and procedure

Gurschick et al. 2014. AJHPM epub
Guidelines differ significantly

• Some stress that death should be expected within hours or a few days at most
• Some state that death should be expected within 2 weeks
• Most suggest midazolam as the sedative of first choice, but delirium is the commonest symptom for which PS is given
• Uncritical ‘one-size-fits-all’ mentality?
CDS until Death (France)

A la demande du patient d’éviter toute souffrance et de ne pas subir d’obstination deraisonnable…

1. Lorsque le patient atteint d’une affection grave et incurable et dont le pronostic vital est engage a court terme presente une souffrance refractaire aux traitements

2. Lorsque la decision du patient attaint d’une affection grave et incurable d’arreter un traitement engage son pronostic vital a court terme et est susceptible d’entrainer une souffrance insuportable

*Article L1110-d5-2 LOI No. 2016-87, 2 Feb 2016, art. 3.*
CDS until Death (France)

1. If the patient fulfils the conditions, they have a right to CDS.
2. Not limited to prognosis of <2 weeks
3. Symptoms do not need to be refractory
4. Suffering does not need to be unbearable
The UNBIASED study on therapeutic sedation in Europe (UK-Netherlands-Belgium-International SEDation study)

Exploring decision-making surrounding therapeutic sedation in contemporary clinical practice…
Palliative Sedation in Netherlands & Belgium

• rapid inducement of deep sedation is the norm
• considerable pressure from relatives to hasten dying
• CDS sometimes preceded by a family farewell/party [like euthanasia]

The language of sedation in end-of-life care: The ethical reasoning of care providers in three countries

He was ready to go, he was finished, he was physically finished. He had been able to say goodbye to everyone properly … all the children came, grandchildren, great-grandchildren, all of them … It took him a week to get up the courage to do it … And on the day the sedation started, he again said goodbye to the children and grandchildren … he had had enough … and the doctor then gave Dormicum, and he fell asleep very quickly. And we immediately attached the pump and he went to sleep and he didn’t wake up again. (11V, Belgium, nurse, home)
Palliative Sedation in UK

Emphasis on titrating doses proportionately against symptoms, maintaining consciousness if at all possible. [Reflects EAPC guidance]

‘I haven’t given anyone continuous sedation; there have been lots of patients… agitated at the end of their lives and… it’s appropriate to give medications to relieve that agitation. So we are giving drugs that have sedative effects but the aim is… to relieve that agitation.’

Seymour et al. 2015. Pall Med 29: 48-59
Palliative Sedation & Survival

A typical medical survey compares survival after referral/admission in patients not sedated and those sedated. Typical result: no statistical difference. Conclusion: PS does not shorten survival.

[Quad erat demonstrandum]
## Palliative Sedation & Survival

<table>
<thead>
<tr>
<th>Survival after admission</th>
<th>Inpatient</th>
<th>Home care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-sedated</td>
<td>3.3 days</td>
<td>35 days</td>
</tr>
<tr>
<td>Sedated</td>
<td>6.6 days</td>
<td>38 days</td>
</tr>
<tr>
<td><strong>P value</strong></td>
<td>0.003</td>
<td>0.98 (NS)</td>
</tr>
</tbody>
</table>

**Reference**
Pharmacological mechanism of coma by CDS

*Amer J Hospice & Palliative Medicine 2010; 27: 205-14.*
CDS: ‘normal’ treatment or ‘last resort’ measure?

Given that CDS:
• ends ‘biographical’ or social life
• shortens survival

It should be regarded as an exceptional ‘last resort’ measure and not normal medical practice.
### CDS: % of all non-sudden deaths

<table>
<thead>
<tr>
<th>Country</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>2.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4.8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.7 [→12]</td>
</tr>
<tr>
<td>Belgium</td>
<td>8.2 [→12]</td>
</tr>
<tr>
<td>Italy</td>
<td>8.5</td>
</tr>
</tbody>
</table>

*Miccinesi et al. 2006. JPSM 31: 122-9.*
Incidence of CDS

At a PC centre in Belgium, incidence fell from 7% → 3% over 6 years.

Decrease related to improved standard of PC and team approach to decision-making.


Question: should CDS be limited to patients cared for by a specialist PC team?
CDS: contentious issues

- Does CDS shortens survival?
- ‘Normal’ treatment or ‘last resort’ measure?
- **Drug of choice: midazolam?**
- Existential distress: a legitimate indication?
- When does CDS become ‘slow euthanasia’?
- Is it ethical to withhold artificial hydration?
- Does CDS lead to ‘mission creep’?
Drug of Choice?

• Almost always stated to be midazolam
• Commonest symptom = delirium
• Delirium often made worse by a benzodiazepine
• Drug of choice = haloperidol
• Inappropriate use of midazolam likely to make matters worse [vicious circle]
• Is delirium not being diagnosed?
Delirium: patient with lung cancer

At night, he changed completely. He became aggressive… We went through escalating doses of ketamine [for pain], added in clonazepam, and opioids, and we just didn’t seem to be getting anywhere. And this behaviour began to encroach into the day as well. Even with phenobarbital it wasn’t a quick, easy solution. (UK hospice nurse)

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Journal of Palliative Care 1990; 6 (3):7-11

63/120 → unendurable symptoms
• dyspnoea 33 (52%)
• pain 31 (49%)
• delirium 11 (17%)
• vomiting 5 (8%)
## Palliative Sedation at Home
(percentage with symptom)

<table>
<thead>
<tr>
<th></th>
<th>Delirium</th>
<th>Dyspnoea</th>
<th>Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1*</td>
<td>17</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>Study 2**</td>
<td><strong>83</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

**Mercadante 2014 Home Care Italy Group. JPSM 47: 860-866.
Palliative sedation

>770 patients from 10 studies; >1000 refractory symptoms

A Protocol for the Acute Control of Agitation in Palliative Care: A Preliminary Report

Ferraz Gonçalves, MD, MSc¹, Ana Almeida, MSc¹, Sara Teixeira¹, Sara Pereira¹, and Natércia Edra¹

Amer J Hospice & Palliative Medicine 2012; 29: 522-24
Table 1. Protocol for the Acute Control of Agitation in Palliative Care

<table>
<thead>
<tr>
<th>Treatment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol: 5 mg IM + Midazolam: 5 mg IM</td>
</tr>
<tr>
<td>30 minutes later, if the situation is not controlled:</td>
</tr>
<tr>
<td>Haloperidol: 2 mg SC + Midazolam: 5 mg SC; up to 2 doses (30 minutes interval)</td>
</tr>
<tr>
<td>30 minutes later, if the situation is not controlled:</td>
</tr>
<tr>
<td>Midazolam 5 mg SC every hour until the situation is under control.</td>
</tr>
<tr>
<td>If agitations recurs:</td>
</tr>
<tr>
<td>Less than 2 hours after control: resume the protocol from the interruption point.</td>
</tr>
<tr>
<td>More than 2 hours later: restart the protocol from the beginning.</td>
</tr>
</tbody>
</table>
High risk of delirium when dying

- teenagers and young adults
- parents of young children
- concentration camp survivors
- victims of abuse or torture
- Army Veterans
- not able to express fears and anxieties
- those in complete denial
- those who feel let down/deserted by God
- some priests, monks/nuns
Anticipate high risk of agitated delirium:

- prophylactic psychological intervention, e.g. involve psychologist
- recognize and treat early delirium
- ‘broad-spectrum sedation’
CDS: contentious issues

- Does CDS shorten survival?
- ‘Normal’ treatment or ‘last resort’ measure?
- Drug of choice: midazolam?
- **Existential distress: a legitimate indication?**
- When does CDS become ‘slow euthanasia’?
- Is it ethical to withhold artificial hydration?
- Does CDS lead to ‘mission creep’?
CDS for existential suffering?

Creates unease in health professionals:
• patient not imminently dying?
• patient could survive for many weeks?
• can we be sure that the existential suffering is refractory?
• hydration (& nutrition) indicated?
CDS for Existential Distress

• designate symptoms as refractory only after repeated psychological evaluation
• must be a team decision because individual bias or burn-out can affect decision-making
• sedation initially intermittent

Cherny 1998. JPSM 16: 404-406
CDS for Existential Suffering

Survey in Japan of lead physicians at 105 PCUs

1% (90/9,000) of PCU deaths

Intermittent sedation before CDS = 94%

Morita 2004 JPSM 28: 445-450
CDS for Existential Suffering

Survey in Japan at 105 certified PCUs

• >50% ‘depressed’, of which
• 90% had had antidepressants
• 35% had specialist evaluation [??]
• <60% received specialist psychiatric, psychological or religious care

Morita 2004. JPSM 28: 445-450
CDS for Existential Suffering

Survival:
• <1 week = about 2/3
• >1 week, <1 month = about 1/3
• >1 month = only 1 patient

?? Patients received parenteral fluids

Morita 2004. JPSM 28: 445-450
CDS for Existential Suffering

Reasons for distress:
• meaninglessness/worthlessness
• burden on others/dependency
• death anxiety
• need for control
• lack of social support/isolation

Morita 2004. JPSM 28: 445-450
Long-Term Intermittent PS for Refractory Symptoms at the End of Life in Two Cancer Patients

Song et al. 2015

_J Palliative Medicine_ 18: 807-810.
## “Long-Term Intermittent PS”

<table>
<thead>
<tr>
<th></th>
<th>Woman (46)</th>
<th>Man (65)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary cancer</strong></td>
<td>Rectum</td>
<td>Pancreas</td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td>Pain, insomnia</td>
<td>Pain, delirium</td>
</tr>
<tr>
<td><strong>Sedation time</strong></td>
<td>9 hours</td>
<td>7 hours</td>
</tr>
<tr>
<td><strong>Midazolam dose mg/h</strong></td>
<td>4.5</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td><em>Total = 40mg</em></td>
<td><em>Total = 50mg</em></td>
</tr>
<tr>
<td><strong>Duration of IPS</strong></td>
<td>4 months</td>
<td>4 weeks</td>
</tr>
</tbody>
</table>
CDS: contentious issues

- CDS shortens survival?
- ‘Normal’ treatment or ‘last resort’ measure?
- Drug of choice: midazolam?
- Guidelines: help or hindrance?
- Existential distress: a legitimate indication?
- **When does CDS become ‘slow euthanasia’?**
- Is it ethical to withhold artificial hydration?
- Does CDS lead to ‘mission creep’?
## PS vs. Euthanasia

<table>
<thead>
<tr>
<th></th>
<th>PS</th>
<th>CDS</th>
<th>Euthanasia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intention</strong></td>
<td>To relieve unbearable suffering</td>
<td>To relieve unbearable suffering</td>
<td>To relieve unbearable suffering</td>
</tr>
<tr>
<td><strong>Procedure</strong></td>
<td>Sedative drugs → comfort</td>
<td>Sedative drugs → coma</td>
<td>Lethal drug(s) → death</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Symptom relief</td>
<td>Continuous coma → death</td>
<td>Immediate death of patient</td>
</tr>
<tr>
<td><strong>Proportionate</strong></td>
<td>Yes</td>
<td>Unclear</td>
<td>No</td>
</tr>
</tbody>
</table>
Blurred boundary

Patient’s partner

‘She wanted euthanasia… and the GP was willing. But then he came with the option to put her to sleep… He explained that performing euthanasia is very burdensome. She didn’t want that for us… she decided she wanted to be put to sleep.’

# Regulatory Requirements in Netherlands

<table>
<thead>
<tr>
<th></th>
<th>CDS</th>
<th>Euthanasia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prognosis</strong></td>
<td>&lt;2 weeks</td>
<td>No time limit*</td>
</tr>
<tr>
<td><strong>Competence</strong></td>
<td>Not essential</td>
<td>Yes</td>
</tr>
<tr>
<td>‘Cooling off’ period</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Second opinion</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Paperwork</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Unbearable suffering without prospect of improvement*
Blurred boundary

Palliative Care Consult Team Nurse

‘Sedation was frequently started with the understanding: “If the patient is still here tomorrow, then we will double the dose.” That was commonplace. So in fact they often ended life… since the patient is not awake anymore, what is the point of letting her lie here for days?

‘Mission creep’?

- CDS is sometimes substituted for euthanasia in Netherlands and Belgium
- CDS is sometimes non-voluntary [unrequested] euthanasia
- Norwegian Medical Association has widened its guidance from ‘PS for the dying’ [prognosis <2 weeks] to ‘PS at the end of life’ [prognosis unstated]
‘Mission creep’?

• In USA, it has been proposed that the ‘last resort’ criterion should be dropped, and CDS allowed for any patient with a prognosis of <6 months

• Here, in France, broad criteria allows CDS to substitute for euthanasia
Comment by Doctor in Canada after 40 years in PC

I have never ordered ‘palliative sedation’…
The very concept… fails to capture my clinical reasoning. I do not manage delirium [etc.] with standard treatments and then designate a symptom ‘intractable’, turning to ‘last resort’ therapy for severe cases. I do not shift my clinical goal from symptom relief to ‘sedation’…

Palliative sedation: Conclusions (1)

1. The term ‘palliative sedation’ should be abandoned because it is ambiguous
2. The term ‘continuous deep sedation (CDS) until death’ is unambiguous
3. Physiological considerations indicate that prolonged CDS shortens survival
4. CDS is not normal medical practice; it is an exceptional ‘last resort’ measure
Palliative sedation:
Conclusions (2)

1. Only one type of ethical sedation: proportionate
2. When a rapid reduction in consciousness needed, sedation should be/still is proportionate.
3. Deep sedation for existential distress should be:
   - initially intermittent [respite]
   - continuous: only after evaluation by a skilled psychologist/psychiatrist
4. CDS is sometimes [often?] ‘slow euthanasia’
1. Artificial hydration should be provided if the patient has not already stopped drinking fluids.
2. Because delirium is the commonest symptom for which PS is provided, midazolam alone is generally not the drug of choice.
3. Good palliative care reduces the need for CDS.
4. PC specialists should be involved before proceeding to CDS.
5. CDS should only rarely be necessary.
Thank you!
Does unresponsive mean unaware?

Can we be sure that an unresponsive unconscious patient is totally unaware?

## Richmond Agitation-Sedation Scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Term</th>
<th>Description (brief)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+4</td>
<td>Combative</td>
<td></td>
</tr>
<tr>
<td>+3</td>
<td>Very agitated</td>
<td></td>
</tr>
<tr>
<td>+2</td>
<td>Agitated</td>
<td></td>
</tr>
<tr>
<td>+1</td>
<td>Restless</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Alert and calm</td>
<td></td>
</tr>
<tr>
<td>-1</td>
<td>Drowsy</td>
<td></td>
</tr>
<tr>
<td>-2</td>
<td>Light sedation</td>
<td>Eye contact to voice</td>
</tr>
<tr>
<td>-3</td>
<td>Moderate sedation</td>
<td>Movement to voice</td>
</tr>
<tr>
<td>-4</td>
<td>Deep sedation</td>
<td>Movement to stimulation</td>
</tr>
<tr>
<td>-5</td>
<td>Unrousable</td>
<td>No response</td>
</tr>
</tbody>
</table>
Bispectral Monitoring (BIS)

Beware Reductionism!

• Also see:
  • Renz et al. 2013
  • American Journal of Hospice and Palliative Medicine 30: 283-290.
A Woman aged 34

Admitted to a hospice suffering from disseminated breast cancer.
She had had two stillbirths but now had a much treasured son aged 3 years.
When relatively well she had dealt with her situation intellectually, making all the necessary arrangements for her death.
But as she weakened it was clear that she had not come to terms with her illness emotionally. Now she was asking, "Why all this? Why me?"
She wanted to be able to bring her young son home from play-school, and to cuddle him, but could no longer do so. She lamented her increasing dependence, and feared the loss of control over her bowels and bladder.
Her grief manifested in crushing, intractable pain. She said, "I am resigned to the fact that this is my lot. It is the pain I cannot accept. Dying is all right, but there is no reason for this pain, no purpose in it… Why this pain?"

**Large doses of morphine were ineffective.** Complaints of shattering pain continued; the slightest movement caused her to cringe in pain. Large frequent doses of IV diazepam were needed. Epidural morphine was started and continued for 5 weeks.
Gradually she came to terms with her situation: her need for analgesia became less, and eventually she was pain-free on morphine 10mg PO q4h. She was able to be wheeled down the road on an ambulance trolley to buy an Easter egg for her son, and to visit an art gallery the day before she died.

At what point would you have offered CDS/ physician-assisted suicide/euthanasia?

Explicit Euthanasia Request in a Paris PC Hospital

- In 2010-11, 61/2157 made ER = <3%
- 6 patients repeated their ER = 0.3%; all had uncontrolled symptoms
- In only 4 were they persistent

Explicit Euthanasia Request

Repeated request over first 3 days in PCH; then just ‘wish to die’.
Inpatient for 2 months; psychotherapy, art therapy, PT, antidepressants
One week before her death, complained that she was sleeping too much.

Guirimand et al. 2014.
CDS: contentious issues

• CDS shortens survival?
• ‘Normal’ treatment or ‘last resort’ measure?
• Drug of choice: midazolam?
• Guidelines: help or hindrance?
• Existential distress: a legitimate indication?
• When does CDS become ‘slow euthanasia’?
• Is it ethical to withhold artificial hydration?
• Does CDS lead to ‘mission creep’?
CDS and artificial hydration

‘Not normally necessary if the patient has stopped drinking before sedation is initiated. [But] if the patient is ingesting fluids in any significant amount or is receiving parenteral fluids before palliative sedation is initiated, parenteral fluid infusion should continue.’

(From Tidsskrift Norske Legeforening 2015: 135: 220-1)
Parenteral hydration in the dying

1. patient experiencing symptoms & dehydration probable cause *thirst, hypotension, delirium*
2. increased oral intake not feasible
3. anticipation that hydration will benefit *because of severe dysphagia, vomiting, diarrhoea*
4. patient’s general condition is relatively good *e.g. some head & neck cancer patients*
5. patient willing
6. patient and family understand that it is for relief of symptoms, not to cure
Artificial Hydration

• give a provisional time limit, e.g. 2-3 days
• ‘will discontinue after this if not helpful’
• contra-indications:
  ➢ patient unwilling
  ➢ burdens outweigh likely benefits?
  ➢ patient moribund for other reasons
### CDS and artificial hydration

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
<th>With ANH (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>2.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>8.2</td>
<td>5.0</td>
</tr>
<tr>
<td>Italy</td>
<td>8.5</td>
<td>5.5</td>
</tr>
</tbody>
</table>

*Miccinesi et al. 2006. JPSM 31: 122-9.*
Food for Thought

‘Patients tend to be sedated when the carers have reached the limit of their resources and are no longer able to stand the patient’s problems without anxiety, impatience, guilt, anger or despair’

*Main TF. BJMedPsychol 1957; 30: 129-145*
‘Perhaps many of the desperate treatments in medicine can be justified by expediency, but history has the awkward habit of judging some as fashions, more helpful to the therapist than to the patient’

*Main TF. BJMedPsychol 1957; 30: 129-145*
Food for Thought

‘Whereas the law sees assisted suicide and euthanasia as an exception, public opinion is shifting towards considering them rights, with corresponding duties on doctors to act… Don’t go there.’

Theo Boer, former member of a Regional Euthanasia Review Committee, Netherlands
### End-of-life practices: The Netherlands

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2005</th>
<th>2010</th>
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<tbody>
<tr>
<td>CDS</td>
<td>5.6</td>
<td>8.2</td>
<td>12.3</td>
</tr>
<tr>
<td>PAS</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Euthanasia</td>
<td>2.6</td>
<td>1.7</td>
<td>2.8</td>
</tr>
<tr>
<td>NVE*</td>
<td>0.7</td>
<td>0.4</td>
<td>0.2</td>
</tr>
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* illegal

End-of-life practices: Flanders

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>CDS</td>
<td>-</td>
<td>8.2</td>
<td>14.5</td>
<td>12.0</td>
</tr>
<tr>
<td>PAS*</td>
<td>0.12</td>
<td>0.01</td>
<td>0.07</td>
<td>0.05</td>
</tr>
<tr>
<td>Euthanasia</td>
<td>1.1</td>
<td>0.3</td>
<td>1.9</td>
<td>4.6</td>
</tr>
<tr>
<td>NVE*</td>
<td>3.2</td>
<td>1.5</td>
<td>1.8</td>
<td>1.7</td>
</tr>
</tbody>
</table>

* illegal

*Chambaere et al. 2015. NEJM 372: 1179-81.*
Hospital doctor, Netherlands

‘We definitely follow the rules… So the prognosis has to be <2 weeks, with refractory symptoms. And sometimes I think we have to wait too long for that… So when she got the itch we could do nothing about, I thought hooray… now we can do sedation.’ (Reflecting on the care of a woman with renal cancer.)

Seymour et al. 2015. Pall Med 29: 48-59
Blurred boundary

Home care nurse

‘We are doing it [increasing the dose] and it happens all the time in practice. And that is very difficult for me… How can the team cope with the fact that yesterday the pump was on such and such a dose but today it is at a higher dose?’

Blurred boundary

Home care nurse

‘[For euthanasia]… a physician should consult with the nursing team and with the family, whereas for PS there are no procedures… So it is precisely the profile of very dominant and hierarchical physicians that matches very well with PS, because there they hold absolute sway… So it is true that there is a certain kind of physician who chooses not to perform euthanasia, but performs PS instead… ‘We will quietly increase the dose’… We call those patients *sans papier*…


Also see Harrison 2008. BMJ 336: 1085.
Terminology for sedation in EOLC

Principle of Double Effect and CDS

Because *prolonged* CDS shortens life, the undergirding principle is ‘choosing the lesser of two evils’:

permanently ending biographical life in order to relieve intolerable suffering.

Principle of Double Effect and CDS

Applicable only if the permanent loss of consciousness is a *side-effect* of administering sedatives, rather than the intent.

Guidelines

Netherlands
• KNMG
• revised 2009
• 78 pages

Norway
• Medical Association
• revised 2014
• 2 pages
Dutch Preconditions for Continuous Sedation

1. one or more refractory symptoms
2. the expectation that death will ensue in the reasonably near future (<1-2 weeks).

In these circumstances, a medical practitioner may decide to initiate sedation and to continue it until the moment of death.

Royal Dutch Medical Association (KNMG) 2009
Palliation Sedation: What?

‘Palliative sedation generally refers to the intermittent or continuous use of sedatives and hypnotics for symptom palliation in end-of-life care without necessarily altering the level of consciousness’

_Rady & Verheijde Lancet Oncology 2016_
Principle of double effect

CDS (when justified) is an example of double effect:

A single act having two possible foreseen effects, one good and one harmful, is not always morally prohibited if the harmful effect is not intended and if there is no safer alternative.
Abysmal Palliative Care: young man with cancer

‘On Monday morning he was still there, but he was very miserable; so I decided to sedate him because he was gasping like a fish out of water even with maximum oxygen, soaked in sweat and stressed… terrified, couldn’t get comfortable and could barely talk.’ (Dutch oncologist)
Palliative sedation

Sedative drugs given to >700 patients in 9 studies

*Maltoni et al. 2013 Curr Opin Oncol 25: 360-7.*
Aim: to assess evidence of benefit of PS on refractory symptoms and QL; and effect on survival

Primary outcome: QL/well-being

Studies: 14/70

Patients → PS: 12-67%

Duration (days): mean 1, median 4.3

range 1-43
Reproduced from Porta-Sales 2013. In: Sterckx et al. CDS at the EOL, p.77
Reproduced from Porta-Sales 2013. In: Sterckx et al. CDS at the EOL, p.77
Continuous Deep Sedation

‘… induces and maintains deep sedation or unrousable state (-4 or -5 on Richmond Agitation-Sedation Scale) with continuous administration of sedatives.’

Rady & Verheijde Lancet Oncology 2016