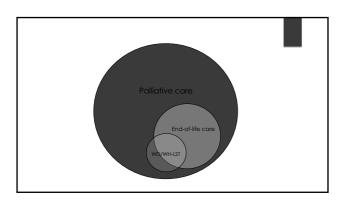
Withholding and withdrawing of life "sustaining" support ATIKUN LIMSUKON, MD ASSI. PROF. OF MEDICINE DIVISION OF PULMONARY, CRITICAL CARE AND ALLERGY DEPARTMENT OF INTERNAL MEDICINE FACULTY OF MEDICINE CHIANG MAI UNIVERSITY

WHO's definition of palliative care for adults

"Palliative care is an approach that improves the quality of life of patients (adults and children) and their families who are facing problems associated with life-threatening illness. It prevents and relieves suffering through the early identification, correct assessment and treatment of pain and other problems, whether physical, psychosocial or spiritual"

http://www.who.int/en/news-room/fact-sheets/detail/palliative-care



The difficults

- ▶ "Palliative" care in the "Intensive" care unit, where primary goal is "life sustaining" to "recovery"
- ▶ "Mindset" and "perception" about withholding and withdrawing of LST do vary
- ▶ "Optimistic" vs. "Pessimistic"

Life sustaining treatment

- ► Fluid
- ► Medications: antibiotics, vasopressors/inotropes
- ▶ Blood products
- ▶ Nutrition
- Artificial support: artificial airway, mechanical ventilation, dialysis, ECMO etc.
- ► CPR, defibrillator
- ▶ Etc.

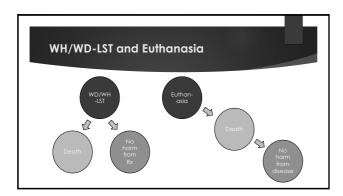
LST: double-edged sword

echnology



- ► But might not always "worthful"
- ► Worthful: minimal harm and more benefit and most likely high potential for success and meaningful outcome
- ▶ Worthless: Futile, more harm, unpleasant, more pain/discorfort, less likely to success with meaningful outcome

ตายดี (good death) > พุทธ: ตายตี มีสติ ไม่หลงตาย > คริสต์ และ อิสลาม: die peacefully with dignity



Factors influencing DLST Medical reasons Personal/Psycho-social reasons Ethical reasons Cultural Religion Legislation

Some problems with end-of-life care in ICU

- ▶ Variability in EOL practice
- ▶ Elusive knowledge of patients' preferences
- \blacktriangleright Poor communication between ICU staffs and surrogates
- ▶ Insufficient training in EOL care

Thompson BT. Crit Care Med 2004; 32:1781-1784

Decision-Making on Withholding or Withdrawing Life Support in the ICU A Worldwide Perspective



- ► Observational study
- ▶ 730 ICUs, 84 countries
- ▶ 9,524 pts, died 2,076 (24%)
- ► Decision to WH/WD of LST (DLST) was taken during ICU stay in 1,259 (13%)
 - ▶ 820 (40% of non-survivors)
- ► 439 (5% of survivors)

 ICU (56% vs 11%) and hospital (69% vs 17%) mortality was higher in group with than without DLST

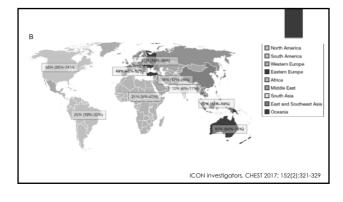
ICON investigators. CHEST 2017; 152(2):321-329

rameter	All Patients	No Decision	Decision	P
o. of patients	9,524 (100)	8,265 (86.8)	1,259 (13.2)	
e, y	60.1 ± 18.1	59.4 ± 18.0	64.4 ± 17.5	< .001
sle ^a	5,659 (60.1)	4,936 (60.4)	723 (58.2)	.13
verity scores				
SAPS II score	40.1 ± 18.3	38.2 ± 17.4	52.1 ± 19.6	< .001
SOFA score at admission	6.0 ± 4.4	5.6 ± 4.2	8.3 ± 4.7	< .001
Max SOFA score	7.5 ± 4.9	7.1 ± 4.7	10.7 ± 5.2	< .001
pe of admission ^b				< .001
Surgical (nontrauma)	3,246 (36.0)	2,957 (37.7)	289 (24.8)	
Medical	5,107 (56.6)	4,323 (55.0)	784 (67.3)	
Trauma	608 (6.7)	522 (6.6)	86 (7.4)	
Other	57 (0.6)	51 (0.6)	6 (0.5)	
surce of admission				< .001
Other hospital	922 (9.7)	787 (9.5)	135 (10.7)	
ED/ambulance	3,632 (38.1)	3,084 (37.3)	548 (43.5)	
OR/recovery room	1,724 (18.1)	1,602 (19.4)	122 (9.7)	
Hospital floor	2,457 (25.8)	2,073 (25.1)	384 (30.5)	
Other	789 (8.3)	719 (8.7)	70 (5.6)	

Comorbidities				
COPD	1,171 (12.3)	963 (11.7)	208 (16.5)	< .001
Cancer	989 (10.4)	820 (9.9)	169 (13.4)	< .001
Metastatic cancer	318 (3.3)	240 (2.9)	78 (6.2)	< .001
Hematologic cancer	200 (2.1)	165 (2.0)	35 (2.8)	.07
Insulin	919 (9.6)	791 (9.6)	128 (10.2)	.5
Heart failure, NYHA functional class III/IV	878 (9.2)	704 (8.5)	174 (13.8)	< .001
Chronic renal failure	864 (9.1)	726 (8.8)	138 (11.0)	.01
HIV infection	66 (0.7)	56 (0.7)	10 (0.8)	.64
Cirrhosis	339 (3.6)	274 (3.3)	65 (5.2)	< .001
Immunosuppression	328 (3.4)	271 (3.3)	57 (4.5)	.02
Steroid therapy	331 (3.5)	272 (3.3)	59 (4.7)	.01
Chemotherapy	254 (2.7)	209 (2.5)	45 (3.6)	.03
Infectious status				< .001
Infection	3,428 (36.0)	2,825 (34.2)	603 (47.9)	
Sepsis	1,187 (12.5)	994 (12.0)	193 (15.3)	
Septic shock	1,539 (16.2)	1,184 (14.3)	355 (28.2)	
No. of organ failures				< .001
None	2,366 (24.8)	2,221 (26.9)	145 (11.5)	
1 organ	2,627 (27.6)	2,436 (29.5)	191 (15.2)	
2 organs	1,843 (19.4)	1,601 (19.4)	242 (19.2)	
3 organs	1,309 (13.7)	1,039 (12.6)	270 (21.4)	
> 3 organs	1,379 (14.5)	968 (11.7)	411 (32.6)	
Procedures				
Mechanical ventilation	5,058 (53.1)	4,166 (50.4)	892 (70.8)	< .001
Renal replacement therapy	1,135 (11.9)	908 (11.0)	227 (18.0)	< .001

Parameter	All Patients	High GNI	Upper-Middle GNI	Low/Lower-Middle GN
Total No. of patients	9,524	6,004	2,355	1,165
DLST (%) in the whole cohort	1,259 (13.2)	816 (13.6)	374 (15.9)°	69 (5.9)°
DLST (%) in the hospital nonsurvivors	820 (39.5)	621 (48.4)	161 (26.6) ^a	38 (20.2) ^a
Age, y	64.4 ± 17.5	68.0 ± 15.1	57.7 ± 19.7°	58.9 ± 18.8°
Severity scores				
SAPS II score	52.1 ± 19.6	55.0 ± 19.1	46.9 ± 19.6°	45.7 ± 17.8°
SOFA score at admission	8.3 ± 4.7	8.8 ± 4.7	7.6 ± 4.5°	6.6 ± 4.2°
Septic shock	355 (28.2)	264 (32.4)	76 (20.3) ^a	15 (21.7)
Length of ICU stay, median (IQR), d	4.0 [2.0-8.0]	4.0 [1.0-8.0]	4.0 [2.0-8.0]	3.0 [1.0-6.0]
Length of hospital stay, median (IQR), d	6.0 [2.0-14.0]	6.0 [2.0-14.0]	7.0 [3.0-16.0] ^a	3.0 [1.0-6.0] ^a
ICU mortality	682 (55.6)	515 (63.7)	135 (38.4) ^a	32 (49.2) ^a
Hospital mortality	820 (68.7)	621 (77.2)	161 (49.2) ^a	38 (60.3) ^a

ICON investigators. CHEST 2017; 152(2):321-329



- ► Multivariable analysis, independent predictor of DLST were
 - ► Greater severity of disease
 - ▶ Presence of solid or metastatic cancer
 - ▶ Presence of ≥ 2 organ failures
 - ► COPD
 - ► CHF NYHA III/IV

ICON investigators. CHEST 2017; 152(2):321-329

US Physicians' Opinions about Distinctions between Withdrawing and Withholding Life-Sustaining Treatment

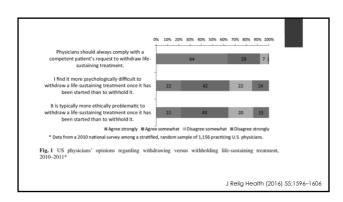
Grace S. Chung $^1\cdot$ John D. Yoon $^1\cdot$ Kenneth A. Rasinski $^2\cdot$ Farr A. Curlin 3

- ► Survey US physicians about withdrawing and withholding LST
- Assessed level of agreement with 3 statements
 - Physicians should always comply with a competent patient's request to withdraw LST
 - ▶ I find it more psychologically difficult to withdraw a LST once it has been started than to withhold it
 - ▶ It is typically more ethically problematic to withdraw a LST once it has been started than to withhold it

J Relig Health (2016) 55:1596–1606

	Physicians N (%)	1156 physicians	
Demographic characteristics			
Age Gender Female	45.9 ± 0.3 400 (35)		
Made Region Nordraut South Midwest West Reacethnicity White, non-Hispanic Black, non-Hispanic Asian Hispanic or Latino Other	756 (65) 279 (24) 378 (33) 283 (24) 216 (19) 758 (66) 43 (4) 237 (21) 47 (4) 65 (6)	Religious affliation Printstant, non-E-magelical Hindu Jewish Muslim Roman Catholic Protestant, E-magelical None Other	256 (23) 80 (7) 109 (10) 110 (10) 295 (26) 85 (8) 129 (12) 55 (5)
Immigration history Bom in the USA Immigrated to the USA	721 (63) 424 (37)		

Practice characteristics	
Care of dying patients (in past 12 mos)	
4 or fewer	288 (25)
5–10	304 (26)
11-30	294 (25)
31 or more	270 (23)
Specialty	
General specialties	700 (61)
End-of-life specialties	456 (39)
Religious characteristics	
Attendance at religious services	
Never	159 (14)
Once a month or less	559 (50)
Twice a month or more	408 (36)
Importance of religion	
Not very important/not applicable	307 (27)
Fairly important	351 (31)
Very important	331 (29)
Most important	139 (12)



Religious measures were not associated with agreement to patient's request Religious doctors more likely to indicate "ethical problematic" with WD-LST but not "psychologically difficult" Doctors with more experience in caring of dying patients were less likely to report both "psychological" or "ethical" distinction between WD and WH-LST Doctors working in end-of-life specialties (hospice and palliative care/geriatrics, oncology, and pulmonary/critical care) also reported less distinction between the two compared to general specialties

J Relig Health (2016) 55:1596-1606

Burden on doctors and nurses

- ► Grief and human suffering
- ► Anxiety
- ▶ Depression
- ► Difficulty balancing professional role and personal feelings
- ▶ Emotional exhaustion
- ▶ Burn out

DRIGINAL ARTICLE

End-of-life care in intensive care unit: Family experiences



Leah C. Kisorio*, Gayle C. Langley¹

17 families

Findings: Five major themes emerged: "Imost of the time we are in darkness", "remotional support", "involvement", "family presence" and "spiritual support". Conclusion: The findings reflect inadequate care to the families who had dying relatives in the intensive care unit. Negative experiences expressed by the families outweighed their positive experiences, as most families were not happy with the care observed or personally received while their relatives were in the intensive care unit.

Intensive and Critical Care Nursing (2016) 35, 57—65

Advance directives/care planning

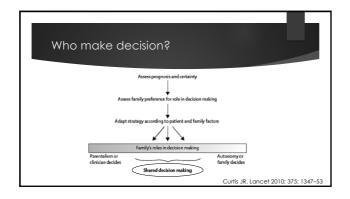
- ► Associated with
 - ▶ Care received matching with patient's preference
 - \blacktriangleright Less aggressive care at end-of-life
 - ▶ Better family satisfaction

พระราชบัญญัติสุขภาพแห่งชาติ พ.ศ.2550

▶ มาตรา 12

"บุคคลมีสิทธิทำหนังสือแสดงเจตนาไม่ประสงค์จะรับบริการสาธารณสุขที่ เป็นไปเพียงเพื่อยืดการตายในวาระสุดท้ายของชีวิตตน หรือเพื่อยุติการ ทรมานจากการเจ็บป่วยได้ การตำเนินการตามหนังสือแสดงเจตนาตามวรรค หนึ่งให้เป็นไปตามหลักแกมต้นละวิธีการที่กำหนดในกฎกระทรวง เมื่อผู้ประกอบ วิชาชีพด้านสูาธารณสุขได้ปฏิบัติตามเจตนาของบุคคลูตามวรรคหนึ่งแล้วมิให้ถือว่า การกระทานั้นเป็นความผิดและให้พ้นจากความรับผิดทั้งปวง"

- 🕨 ร่างพระราชบัญญัติสุขภาพแห่งชาติ ว่าด้วยสิทธิการตาย มาตรา 24 ระบุไว้ว่า
- ➤ บุคคล มีสิทธิแสดงความจำนงเกี่ยวกับวิธีการรักษาพยาบาลหรือปฏิเสธการรักษาที่ เป็นไปเพื่อการยืดชีวิตในวาระสุดท้ายในชีวิตของตนเอง เพื่อการตายอย่างสงบและมี ศักดิ์ศรีของความเป็นมนุษย์ โดยมีคำขึ้แจงว่าเพื่อให้บุคคลมีสิทธิเลือกตายอย่างสงบ และมีคักดิ์ศรีของความเป็นมนุษย์ ในนั้นปลายของชีวิต โดยไม่ยืดชีวิต หรือถูก แรรกแขงการตายเกินความจำเป็น และเพื่อไม่ให้เป็นภาระทุกๆ ด้าน โดยให้มีสิทธิ แสดงความจำนงส่วงหน้า (Living will) ในร่างพ.ร.บ. นี้ ไม่ใต้กล่าวถึงการให้แพทย์มี สิทธิ์ชาให้ปวยด้วยความสงสาร (การุณขยาต) และไม่ใต้กล่าวถึงการให้แพทย์มี ผู้ป่วยผ่าตัวตายด้วยกราสสงสาร (การุณขยาต) และไม่ได้คล่าวถึงการให้แพทย์ช่วยให้ ผู้ป่วยผ่าตัวตายด้วยกรจัดหาอุปกรณ์ปลิตชีพให้ผู้ป่วย



9

Communication is a key to success

- ▶ Interdisciplinary collaboration and communication

 - ▶ Varies across countries and hospital settings
 - ▶ Poor collaboration → increase burn-out, anxiety, depression, post traumatic stress and conflicts between providers and family
- ▶ Communication between clinicians and family

Panel 2: Proposed best practices for ethics and end-of-life care in the intensive care unit (ICU)

ICU polices

- Explicit policy for admission and transfer criteria
- Explicit policy for delivery of palliative and end-of-life care
- Training for ICU clinicians in ethics, communication, and end-of-life care

Interdisciplinary communication

- All patients included in daily interdisciplinary rounds
- Daily interdisciplinary communication about the goals

Curtis JR. Lancet 2010; 375: 1347-53

Communication with families

- Open visiting hours for family members
- Allow family presence during ICU rounds
- Routine interdisciplinary family conferences within 48–72 h for family of patients at high risk of death or prolonged stay

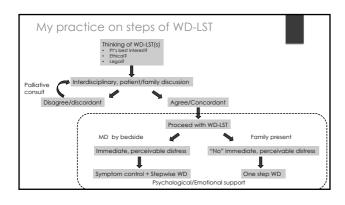
Withholding or withdrawing life support

- Explicit policy about withholding and withdrawing life
- Protocol for withdrawing life support
 Train clinicians from all disciplines regarding ethics and communication about withholding and withdrawing life
- Staff support programmes about end-of-life care, and $with holding \, or \, with drawing \, life \, support \,$

Curtis JR. Lancet 2010; 375: 1347-53

Pand 3: Key stages for improvement of communication during interdisciplinary family conferences in the intensive care unit	
Before - Plan the specific details of location and setting-quiet, private place? - Do a preconference with the clinicians to develop consensus and ensure consistency of information provided	_
During - Use active listening and provide family adequate time to speak? - Use empathic statements to provide support for families. ⁵⁰ difficulty of hawing a critically ill Leved one, difficulty of surrogate decision making, impending loss of a loved one - Acknowledge and address family emotions. ⁵⁰ - Usine and flocus on patient values and treatment preferences. ⁵⁰ - Affirm non-abandonment of patient and family. ⁵¹	
Completion • Summarise information and decisions • As for questions, and allow family time to consider questions [©] • Reaffirm and support family with respect to their decisions [©]	Curlis JR. Lancet 2010: 375: 1347-53

Document of rationale to WD/WH-LST Develop explicit plan for procedure Patient should be in appropriate setting, unnecessary monitor removed Document detailed process of WH/WD Assess outcomes of WH/WD Some WD process need tapering to allow time to treat discomfort ie. mechanical ventilation



 $\textit{Panel 4:} A n \ eight-step\ approach\ to\ terminal\ with drawal\ of\ mechanical\ ventilation$

- Communicate withdrawal process with patient (if able to communicate), patient's family, and intensive care unit team, and document decision making and communication in the medical record
- 2 Explain to patient and family the likely time course, uncertainty of that time course, and possible symptoms and treatment plan for symptoms when withdrawing life-
- sustaining treatment
 Assess patient comfort and treat discomfort as necessary, often with opiate or benzodiazepine drugs, depending on the symptoms identified Remove positive end expiratory pressure, and turn inspired oxygen fraction to room air Reassess patient's comfort, and treat discomfort as necessary

- Reduce ventilatory support by about 50%
 Repeat steps 5 and 6 until ventilator support has been discontinued
- $8\quad Remove \, mechanical \, ventilator, \, and \, extubate \, patient \, or \, attach \, T-piece \, with \,$ humidified air

Symptom management

Symptoms

- ▶ Dyspnea
- ▶ Anxiety ▶ Depression
- ▶ Delirium
- ▶ Thirst
- ► Constipation
- ▶ Spiritual distress

Assessment

- ▶ Asking
- ► Exam► Observation
- ► Assessment scales/tools

Treatment

- Pharmacologic opioid, anxiolytic, antipsychotic, antidepressant, palliative sedation
- ► Non-pharmacologic- counseling,

Thank you Cure sometimes, treat often, comfort always. ~ Hippocrates