



 **臺北市立萬芳醫院**
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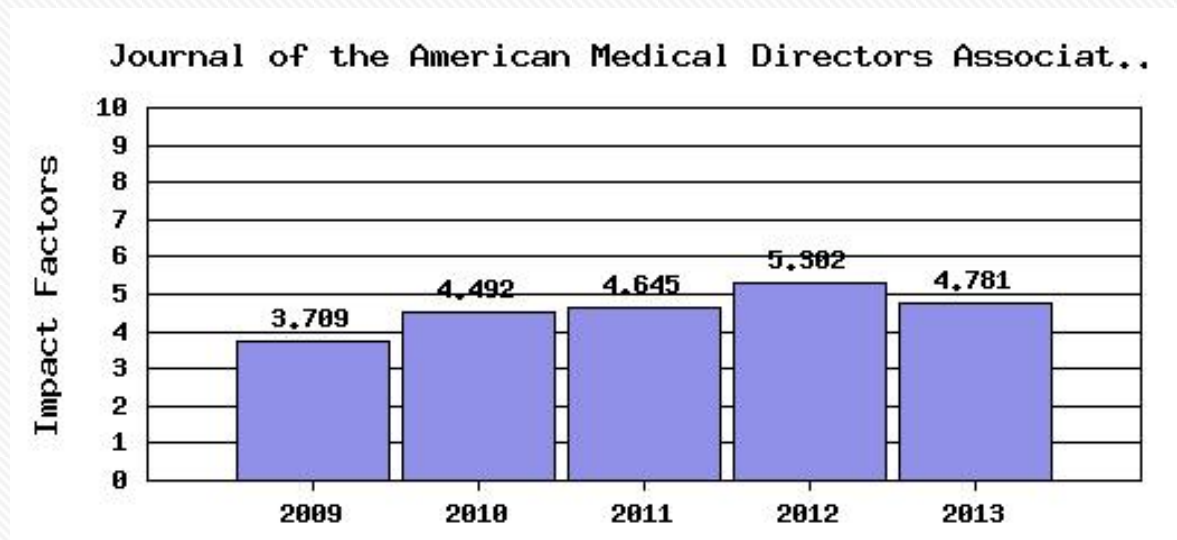
Efficacy of Advance Care Planning: A Systematic Review and Meta-Analysis

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Efficacy of Advance Care Planning: A Systematic Review and Meta-Analysis

Carmen H.M. Houben, Martijn A. Spruit, Miriam T.J. Groenen, Emiel F.M. Wouters, Daisy J.A. Janssen (2014).
Journal of the American Medical Directors Association, 15, 477- 489.



Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category
GERIATRICS & GERONTOLOGY	49	5	Q1

前言¹

- Advance care planning (ACP) 為病人在與醫療人員、家人及其他重要的人討論後，替自己做出將來的醫療照護決策、為將來的治療決策做準備的過程
- 從前ACP被視為完成生前預囑(advance directives)的同義詞
- 近來ACP被視為包含討論照護目標、急救與維生醫療、安寧緩和照護、醫療決策代理人與生前預囑的持續性過程



前言²

- 醫師與病患間在討論臨終照護時存在許多的障礙
- 醫師的障礙在於缺乏時間和溝通技巧、對病患的情緒感到不自在，且怕破壞病患的希望
- 病患的障礙在於對於ACP的不認識、假設醫師會在他們需要時主動開口討論
- 因為缺乏ACP，維生醫療決策通常在緊急狀態下完成，很可能與病患的臨終照護意向不一致，進而造成親人的壓力



研究假設

- 1) ACP 介入能增加生前預囑的完成與醫病間臨終照護的討論
- 2) ACP 介入能促進臨終照護的溝通品質、臨終照護意向與實際接受到的照護間之一致性



步驟1

研究探討的問題為何？

研究族群／問題 (P)

Different adult patient populations

介入措施 (I)

Advance care planning (ACP)

比較 (C)

Usual care

結果 (O)

Primary outcome -

Completion of advance directives

Occurrence of end-of-life discussions

Secondary outcome -

Concordance between preferences for care and delivered care

Knowledge of ACP

End-of-life care preferences

Quality of communication

Satisfaction with healthcare

Decisional conflict

Use of healthcare services

Symptoms

(介入型 PICO)

步驟2 系統性文獻回顧的品質如何？(FAITH)

Find—研究是否找到所有的相關證據

良好的文獻搜尋至少應包括二個主要的資料庫，並且加上文獻引用檢索(參考文獻中相關研究、Web of Science, Scopus 或 Google Scholar)、試驗登錄資料等。文獻搜尋應不只限於英文，並且應同時使用 MeSH 字串及一般檢索詞彙(text words)。

- A computerized literature search was performed in the databases Medline/PubMed and Cochrane Central Register of Controlled Trials from 1966 through September 2013.... In addition, reference lists of selected articles were searched by hand to identify relevant articles that may have been missed by the initial search strategy.
- Articles had to meet the following criteria to be selected for the review: (1) describe original data; (2) randomized controlled trial; and (3) written in English.

評讀結果： ☐是✓ ☐否 ☐不清楚

Potentially relevant articles identified from electronic search (n = 26628)

Articles excluded after using filters
- Not written in English (n = 2068)
- No RCT (n = 24017)

Articles identified from electronic search (n = 543)

Articles excluded on the basis of abstract (n = 479)

Articles reviewed in detail (n = 64)

Additional articles identified
from reference lists
(n = 0)

Pediatric patients (n = 4)
ACP ≠ topic of interest (n = 1)
No original data (n = 1)
No data from the control group (n = 1)
Qualitative study (n = 1)

Articles included in final analysis
(n = 56)

Cancer (n = 3)
Cardiac diseases (n = 4)
COPD (n = 1)
CRF (n = 4)
Dementia (n = 1)
HIV (n = 2)
Combination of diseases (n = 24)
Nursing home residents (n = 4)
Healthy and elderly (n = 8)
Health care provider (n = 4)
Unknown (n = 1)

Appraisal—文獻是否經過嚴格評讀

應根據不同臨床問題的文章類型，選擇適合的評讀工具，並說明每篇研究的品質(如針對治療型的臨床問題，選用隨機分配、盲法、及完整追蹤的研究類型)

- The methodological quality was assessed using the Physiotherapy Evidence-Based Database (PEDro) Scale. The PEDro scale is based largely on the Delphi List and expert consensus.
- It consists of 11 items: 1 item to score the external validity and 10 items to score the internal validity and statistics. Items scored a ‘yes’ if the criterion was clearly satisfied.
- The ‘yes’ from criteria 2-11 were summed to calculate the PEDro score. Previously, trials with a PEDro score of 6 points were classified as “high-quality trials,” whereas trials with a PEDro score <6 points were classified as “low-quality trials.”



評讀結果：✓是□否□不清楚

PEDro scale

1. eligibility criteria were specified no ☐ yes ☐ where:
2. subjects were randomly allocated to groups (in a crossover study, subjects were randomly allocated an order in which treatments were received) no ☐ yes ☐ where:
3. allocation was concealed no ☐ yes ☐ where:
4. the groups were similar at baseline regarding the most important prognostic indicators no ☐ yes ☐ where:
5. there was blinding of all subjects no ☐ yes ☐ where:
6. there was blinding of all therapists who administered the therapy no ☐ yes ☐ where:
7. there was blinding of all assessors who measured at least one key outcome no ☐ yes ☐ where:
8. measures of at least one key outcome were obtained from more than 85% of the subjects initially allocated to groups no ☐ yes ☐ where:
9. all subjects for whom outcome measures were available received the treatment or control condition as allocated or, where this was not the case, data for at least one key outcome was analysed by "intention to treat" no ☐ yes ☐ where:
10. the results of between-group statistical comparisons are reported for at least one key outcome no ☐ yes ☐ where:
11. the study provides both point measures and measures of variability for at least one key outcome no ☐ yes ☐ where:



Included—是否只納入具良好效度的文章

僅進行文獻判讀是不足夠，系統性文獻回顧只納入至少要有一項研究結果是極小偏誤的試驗。

- The methodological quality of the included trials was scored independently by 2 reviewers (C. H. and D.J.). Agreement between the 2 reviewers was 0.89 [95% confidence interval (CI), 0.86-0.93; P <.0001].
- Disagreements were solved by consensus. If no consensus could be achieved, a third reviewer (M.S.) was consulted.

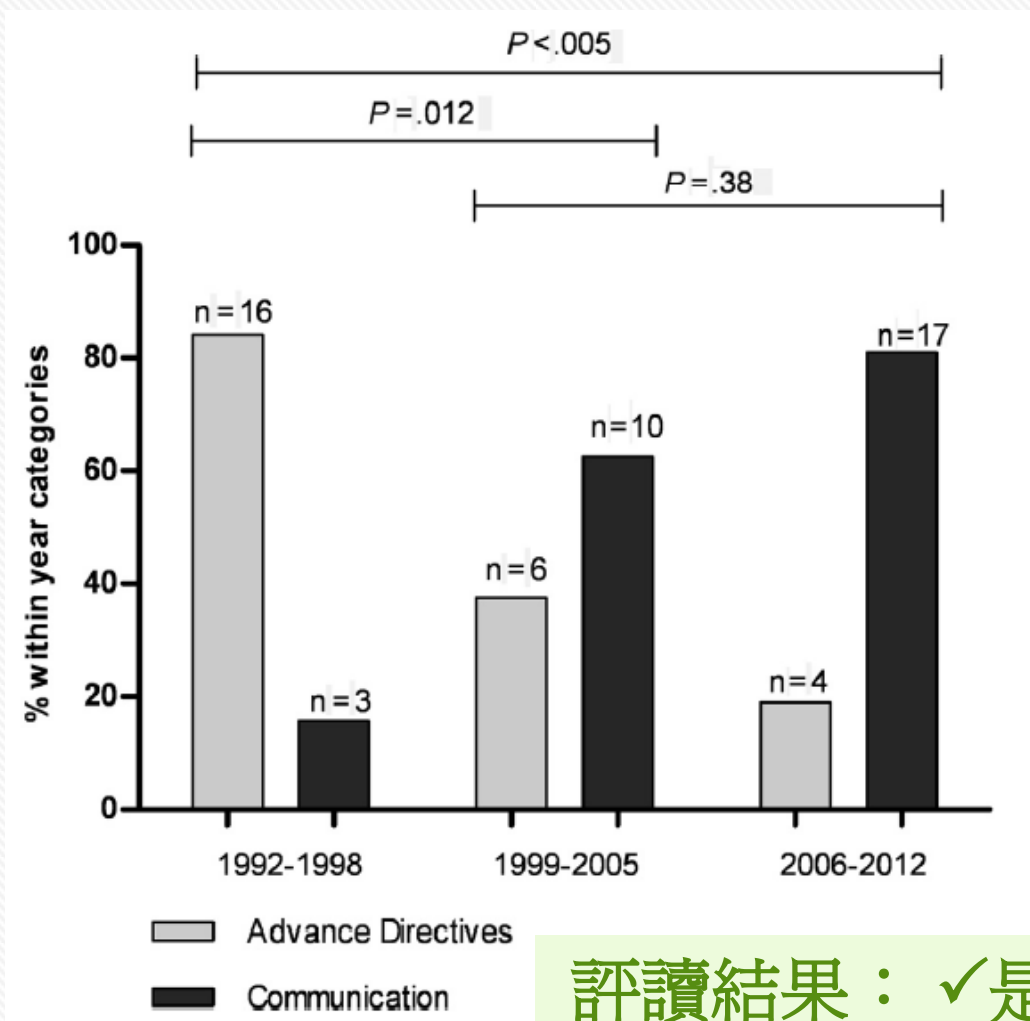
評讀結果：✓是□否□不清楚

Table 2
Methodological Quality (PEDro Scale Score)

Study	1 Eligibility Criteria	2 Random Allocation	3 Concealed Allocation	4 Similarity at Baseline	5 Blinding Patients	6 Blinding Therapists	7 Blinding Assessors	8 Outcome _85% Patients	9 Treatment as Allocated or Intention to Treat	10 Between- Group Comparisons	11 Point Measures and Measures of Variability	Quality (PEDro Score)
Anderson, 1994	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	5
Au, 2012	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	7
Baker, 2000	Yes	Yes	No	No	No	No	No	No	No	Yes	No	2
Barrio-Cantalejo, 2009	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	7
Briggs, 2004	Yes	No	No	No	No	No	No	Yes	No	Yes	No	2
Clayton, 2007	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	8
Detering, 2010	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	7
Dexter, 1998	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	8
Ditto, 2001	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Yes	5
El-Jawahri, 2010	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	6
Engelhardt, 2006	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	6
Gade, 2008	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Yes	6
Green, 2011	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Yes	6
Greenberg, 1993	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Yes	5
Griffith III, 1995	Yes	Yes	No	No	No	No	No	No	No	No	No	1
Grimaldo, 2001	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Yes	6
Gutheil, 2005	Yes	Yes	No	Yes	No	No	No	No	No	Yes	Yes	4
Hanson, 2005	Yes	No	No	No	No	No	No	No	Yes	Yes	No	2
Heffner, 2001	Yes	Yes	Yes	No	No	No	No	No	No	Yes	Yes	4
Heiman, 2004	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	6
Jacobsen, 2011	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	5
Jones, 2011	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	5
Kirchhoff, 2010	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	7
Kirchhoff, 2012	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	7

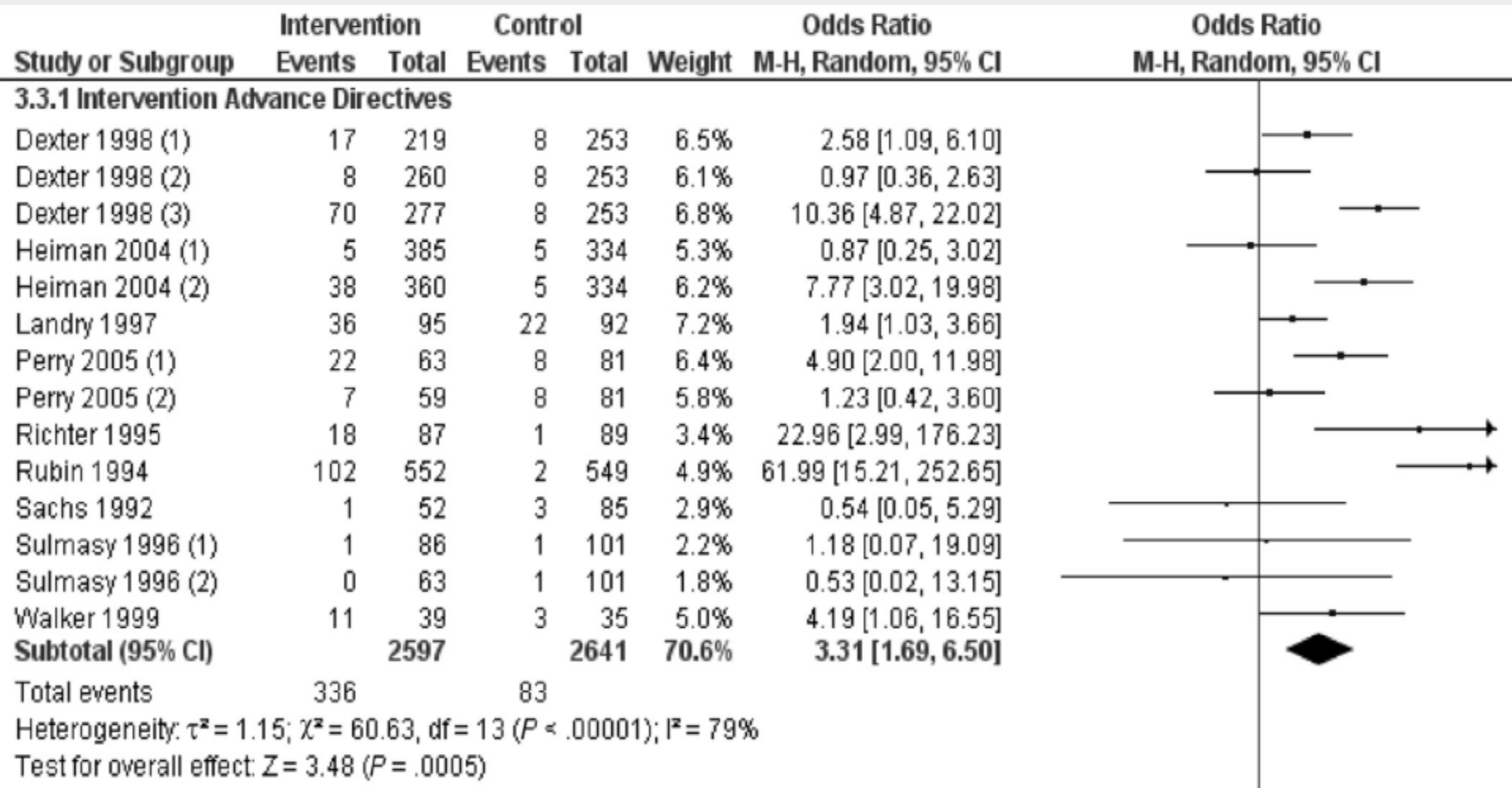
Total up—作者是否以表格和圖表「總結」試驗結果

應該用至少 1 個摘要表格呈現所納入的試驗結果。若結果相近，可針對結果進行統合分析(meta-analysis)，並以「森林圖」(forest plot)呈現研究結果，最好再加上異質性分析



評讀結果：✓是□否□不清楚

A Effect of interventions vs control on completion of advance directives



3.3.2 Intervention communication

Gade 2008	66	275	34	237	7.6%	1.89 [1.19, 2.98]
Grimaldo 2001	16	97	2	98	4.6%	9.48 [2.12, 42.47]
Heffner 2001	8	99	15	185	6.4%	1.00 [0.41, 2.44]
Nicolasora 2006	13	136	1	161	3.4%	16.91 [2.18, 131.03]
Pearlman 2005	57	119	30	129	7.4%	3.03 [1.76, 5.23]
Subtotal (95% CI)		726		810	29.4%	2.76 [1.41, 5.37]

Total events 160 82

Heterogeneity: $\tau^2 = 0.34$; $\chi^2 = 12.40$, $df = 4$ ($P = .01$); $I^2 = 68\%$

Test for overall effect: $Z = 2.98$ ($P = .003$)

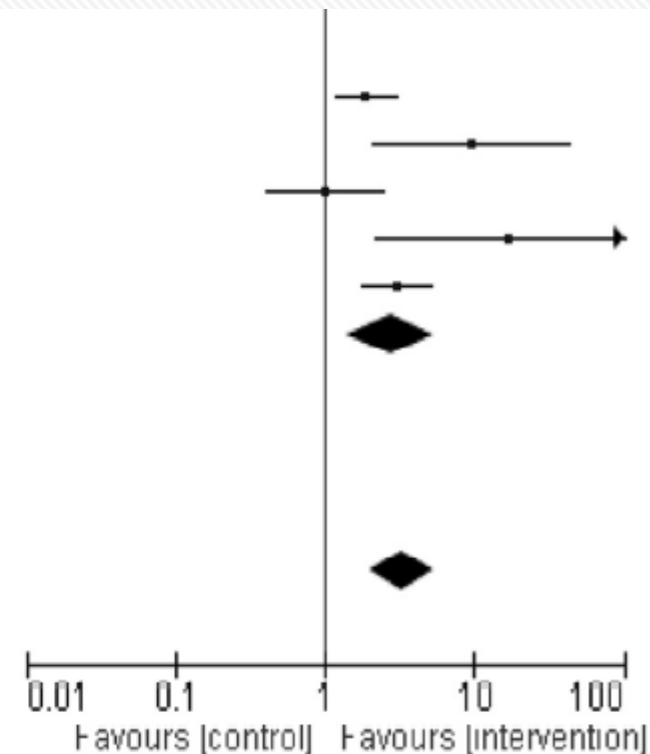
Total (95% CI) 3323 3451 100.0% 3.26 [2.00, 5.32]

Total events 496 165

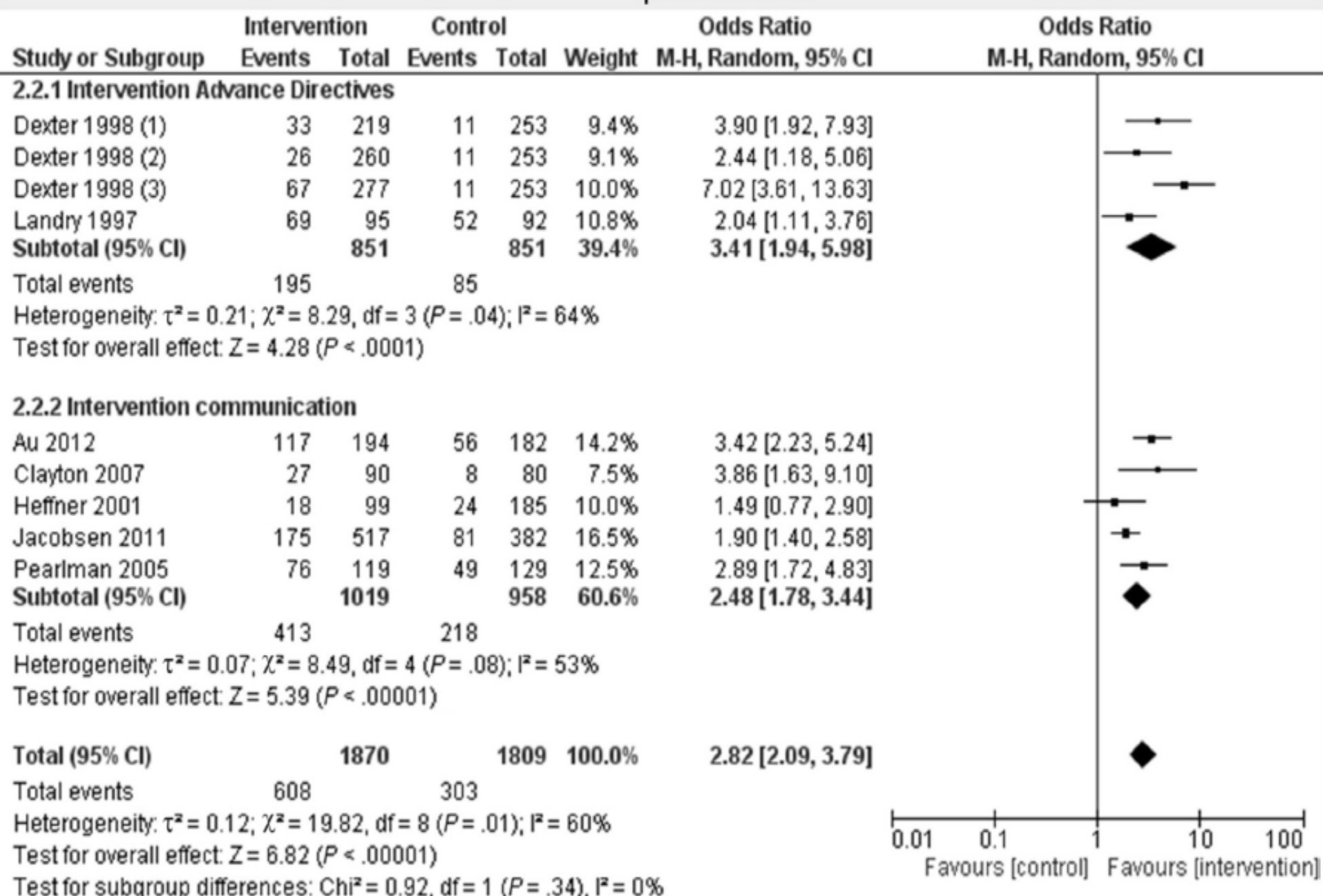
Heterogeneity: $\tau^2 = 0.77$; $\chi^2 = 76.50$, $df = 18$ ($P < .00001$); $I^2 = 76\%$

Test for overall effect: $Z = 4.73$ ($P < .00001$)

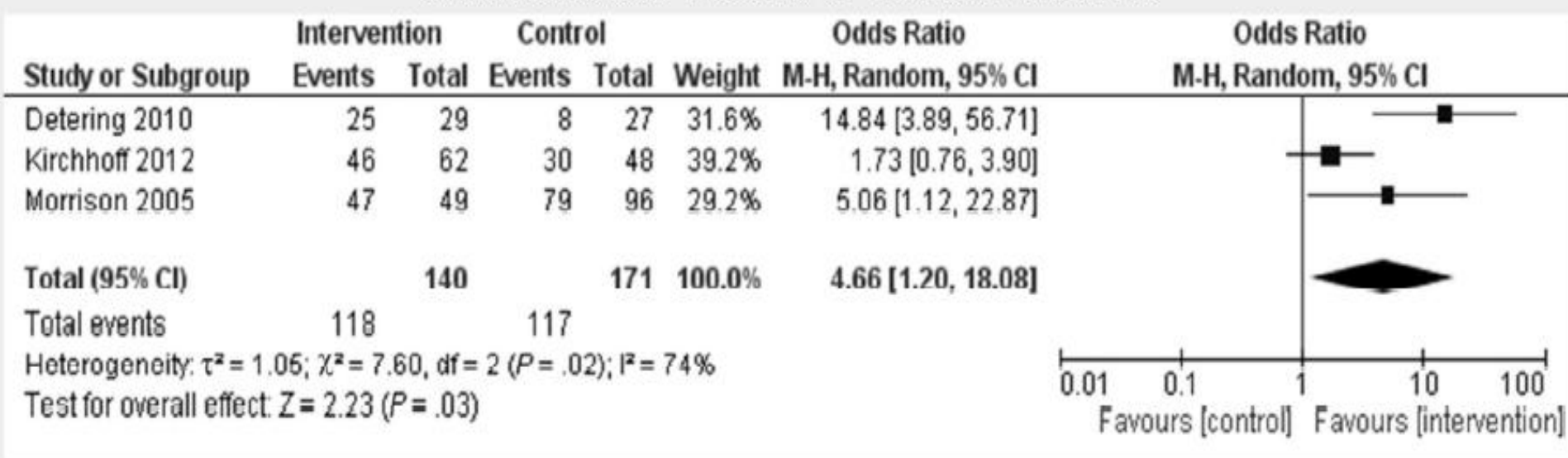
Test for subgroup differences: $\text{Chi}^2 = 0.14$, $df = 1$ ($P = .71$), $I^2 = 0\%$



B Effect of interventions vs control on occurrence of discussions about end-of-life preferences



C Effect of interventions vs control on concordance between patient's preferences for end-of-life care and the end-of-life care received



Heterogeneity異質性－試驗的結果是否相近

在理想情況下，各個試驗的結果應相近或具同質性，若具有異質性，作者應評估差異是否顯著(卡方檢定)。根據每篇個別研究中不同的PICO及研究方法，探討造成異質性的原因。

	Subjects	Intervention	Outcome Parameters	PEDro score
Anderson, 1994	Life-threatening illness I: n = 104; C: n = 100	California DPAHC vs usual care	Health status; psychological well-being	5
Au, 2012	COPD I: n = 194; C: n = 182	Patient-specific feedback form for patients and clinicians vs usual care	Quality of EoL communication; occurrence of discussions	7
Baker, 2000	Family members of deceased hospitalized adults Total: n = 767	SUPPORT intervention vs usual care	Patient clinical status; life-sustaining treatment; circumstance death	2
Barrio-Cantalejo, 2009	Nursing consulting offices I1: n = 59; I2: n = 48; C: n = 64	Andalusian advance directive form intervention vs discussions intervention vs control group	Patient preferences; proxy predictions; accuracy	7
Briggs, 2004	CHF, CRF and cardiovascular surgery I: n = 13; C: n = 14	PC-ACP interview vs usual care	Congruence treatment decisions patient-surrogate; decisional conflict; knowledge of ACP; quality of EoL communication	2
Clayton, 2007	Advanced cancer I: n = 92; C: n = 82	Question prompt list vs usual care	Total number of patient questions during the consultation; total numbers of items discussed; patient and caregiver concerns; achievement of patient information preferences; patient satisfaction; patient anxiety; physician satisfaction with communication; consultation duration	8
Detering, 2010	Patients aged ≥80 admitted to internal medicine, respiratory medicine or cardiology units I: n = 154; C: n = 155	Respecting patient choices vs usual care	Concordance between preferences for care and delivered care; patient satisfaction; impact of a patient's death on relatives; family member's satisfaction with the quality of a patient's death	7
Dexter, 1998	Patients aged ≥75 or ≥50 with serious underlying disease I1: n = 219; I2: n = 260; I3: n = 277; C: n = 253	Physician reminders for instruction directives vs physician reminders for proxy directives vs physician reminders for both directives vs no reminders	Discussions about AD; completed AD forms	8
Ditto, 2001	Outpatients aged ≥65 and their surrogate decision makers I1: n = 81; I2: n = 82; I3: n = 80; I4: n = 83; C: n = 82	Healthcare directive with discussion vs healthcare directive without discussion vs valued life activities directive with discussion vs valued life activities without discussion vs no AD	Accuracy of substituted judgment; perceived benefits of AD completion	5
El-Jawahri, 2010	Malignant glioma I: n = 23; C: n = 27	Video group		

評讀結果： ☐是 ☒否 ☐不清楚

結果為何？

使用何種評估方式，療效有多大（是否來自隨機效果）？
其他說明

- ACP介入提高生前預囑的完成、醫病間關於臨終照護意向的討論與病患臨終照護意向、實際接受的照護間之一致性.
- ACP介入可能促進病患與家人間的溝通品質
- ACP介入似乎不會對病患的焦慮、沮喪與心理健康有害



台灣的現況

- 林佳靜、林秋芬、楊哲銘、盧美秀、賴允亮(2007)-終末病患照護中有關預立醫囑、生前預囑之現況及倫理法律問題
 - 行政院衛生署九十六年委託科技研究計畫
 - 針對全國16家區域級以上醫院發放問卷，回收病人142份、家屬162份、護理人員636份、醫師56份
 - 另回溯死亡病歷2456份



病歷上是否記載病人知病情($N = 2,038$)

	<i>n</i>	%
否/無記錄	1,618	79.4
是	420	20.6



病歷上記載簽署時的原因(複選) (N = 2,038)

	<i>n</i>	%
健康狀況惡化	1,605	78.8
家屬主動提出	282	18.3
無紀錄	203	10.0
不忍病患受苦 (讓病人舒服，沒有痛苦，安祥的離開)	150	7.4
病人意願	118	5.8
無效的疼痛控制	70	3.4
年事已高	63	3.1
經濟拮据	9	0.4
宗教(耶和華見證人，拒絕輸血)	2	0.1

提議簽署意願書/同意書之關鍵人(複選) (N = 2,038)

	N	%
醫師	1,457	71.5
家屬	263	12.9
安寧共照小組	136	6.7
護理人員	96	4.7
病人本身	35	1.7
NP/PA	5	0.2
社工	2	0.1
其它 ^a	2	0.1
無紀錄	291	14.3

^a 其它：安養院 1 人、呼吸治療師 1 人

是否按意願書執行(複選)

	意願書/同意書			臨終前	
	DNR 項目			CPR 項目	
	(N = 2,038)				
	<i>n</i>	(%)		<i>n</i>	(%)
氣管內插管	1,149	(56.4)	⇒	8	(0.4)
人工呼吸	1,020	(50.0)	⇒	50	(2.5)
急救注射藥物	1,023	(50.2)	⇒	137	(6.7)
體外心臟按壓	1,967	(96.5)	⇒	24	(1.2)
心臟電擊	1,891	(92.8)	⇒	6	(0.3)
心臟人工調頻	1,660	(81.5)	⇒	0	(0.0)
其他救治行為	1,219	(59.8)	⇒	0	(0.0)

註. 是否按意願書執行之判定，依據對照意願書/同意書中選擇不施行心肺復甦術（DNR）的項目與臨終前執行心肺復甦術（CPR）的項目作比較。

表二十・生命末期決定的經驗(續)

(n=659)

	醫護人員 (n=516)		病人 (n=70)		家屬 (n=73)		χ^2	p
	n	同意(%)	n	同意(%)	n	同意(%)		
護理人員花費在與病人討論預立醫囑的時間是足夠的。	131	(25.5)	38	(55.9)			26.81	.00
(家屬版：護理人員花費在與您討論預立醫囑的時間是足夠的)					41	(56.9)		
醫師花費在與病人討論預立醫囑的時間是足夠的。	149	(29.0)	41	(60.3)			26.64	.00
(家屬版：醫師花費在與您討論預立醫囑的時間是足夠的)					45	(62.5)		
在您的經驗中，幫助病人完成預立醫囑是件耗費心力的事。	318	(62.0)	-	-	-	-		

表十八・對生命末期決定的態度層面(續)

(n=659)

	醫護人員 (n=516)		病人 (n=70)		家屬 (n=73)		χ^2	p
	n	同意(%)	n	同意(%)	n	同意(%)		
醫護人員應主動協助病人完成預立醫囑。	375	(69.6)	53	(76.8)	-	-	1.52	.22
如果病人的權益未被充份重視，護理人員有責任與醫師以及其他醫療團隊人員討論其醫療處置。	493	(96.1)	62	(88.6)	-	-	7.64	.01
醫護人員應該說服病人接受對他們而言最好的治療。	254	(49.4)	58	(82.9)	-	-	27.69	.00
主動協助某些末期病人死亡(即醫師協助自殺)應該合法化。	106	(20.6)	32	(46.4)	28	(38.9)	29.31	.00
對有決策能力的病人，應徵詢其個人對不施行心肺復甦術的決策。	487	(94.7)	61	(87.1)	-	-	6.16	.01
醫護人員應協助告知病人病情和治療的方法。	450	(87.9)	67	(95.7)	68	(93.2)	5.22	.07

表二十一・醫護人員在協助病人和家屬建立預立醫囑的技巧上，自信的程度

(n=516)

	mean	(SD)
總分(11-55)	29.39	(7.58)
熟悉安寧緩和醫療條例。(1-5)	2.71	(.77)
主動與病人討論預立醫囑。(1-5)	2.61	(.85)
回答病人有關預立醫囑的問題。(1-5)	2.70	(.87)
回答家屬有關預立醫囑的問題。(1-5)	2.72	(.88)
能回應病人對預立醫囑的不確定。(1-5)	2.65	(.84)
熟悉執行機構對於預立醫囑的政策和程序。(1-5)	2.53	(.83)
遵守預立醫囑的相關規定。(1-5)	2.81	(.90)
教導其他醫護人員有關預立醫囑的事宜。(1-5)	2.53	(.86)
當家屬的期望與病人相違背時，能維護病人的預立醫囑。(1-5)	2.86	(.85)
熟悉有關預立醫囑的法律。(1-5)	2.43	(.82)
當病人和家人對生命末期的決定不一致時能居中協商。(1-5)	2.86	(.74)



表二十三・「什麼是醫護人員在協助病人預立醫囑上最需要增加的能力？」 (n=659)

	n	(%)
溝通技巧	139	(21.1)
預立醫囑的相關知識與執行政序	88	(13.4)
安寧條例法規的瞭解	70	(10.6)
安寧相關專業知識與判斷能力	26	(3.9)
須有足夠的時間與建立信任關係後，才有可能談論預立醫囑	26	(3.9)
病情告知與召開家庭會議的能力	13	(2.0)
機構的政策與支持，醫護病的共識	11	(1.7)
醫療宣導與說明文件	8	(1.2)
在預立醫囑前讓病人能獲得更詳細的瞭解醫療流程照護模式並保證不會因為預立醫囑而減少醫療照護	7	(1.1)
避免預設立場	1	(0.2)

臨床上執行Advance Care Planning是否有 助於Advance Directives的完成率，與醫 病間關於End-of-Life Care 的討論？



討論

- 臨床上常見到病患本人並不知道病情，家屬亦刻意隱瞞，ACP原則上為病患自決醫療方向，若病患不知病情，將影響決策適當性。
- 有人會擔心，若簽署不施行心肺復甦術意願書，若遇意外事故至醫院，將得不到積極適當的治療，此顯示民眾與醫療人員的觀念仍須釐清。
- Family Meeting 為適切之溝通平台，藉由全部家屬與病患共同出席、跨團隊醫療說明、釐清問題與澄清誤會或迷思，讓家屬與病患在有共識的情形下做出對病患最有利之臨終照護決策。
- 目前民眾針對ACP之教育仍有待加強與普及，雖然隨著醫療與觀念的進步，要談論Advance directives已較從前容易，但還是因為社會文化與錯誤認知而存在許多困難。



Thank you for your attention~

