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Factors Associated With Family Satisfaction With End-of-Life Care in the ICU - A Systematic Review

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Factors Associated With Family Satisfaction With End-of-Life Care in the ICU - A Systematic Review

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- **CHEST 2015; 147 (1): 82 – 93.**
- Impact Factor: 7.132
- Impact Factor Rank

  3rd among all respiratory systems

  2nd among critical care journals

Background[1]

- 90% of Americans desire to die at home→ 20% experience end-of-life care in an ICU
- “Post-intensive Care Syndrome—Family”
- From “Cure” to “Comfort”
- Family members often suffer from anxiety, depression, posttraumatic stress disorder, and complicated grief

Background[2]

Good death

- Free from avoidable distress and suffering for patients, families, and caregivers
- In general accord with patients' and families' wishes
- Reasonably consistent with clinical, cultural, and ethical standards

Research Question

What **factors** are associated with **family satisfaction** with **end-of-life care** in the **ICU**?

Important Factors[1]

Quality of Dying and Death

↑Quality of Dying and Death (QODD)

- Family presence at time of death
- Perceived nursing skill
- Decision-making support
- Documentation of patient wishes regarding end-of-life care

Important Factors[2]

Communication

- ↑ Higher proportion of family speech vs clinician speech
- ↑ Increased empathic statements assuring non-abandonment, symptom control, and decision-making support

No association between satisfaction and conference length

Survivors *VS.* Non-survivors

Important Factors[3]

Spiritual Care

↑presence of a spiritual advisor in the last day of life

Important Factors[4]

Decision-making

↑Discussion of spiritual needs and the patient’s end-of-life wishes

↑Discussion about withdrawal of life-prolonging interventions

↑Shared decision-making

↓Death in the setting of full support

Important Factors[5]

Withdrawal of Life-Prolonging Therapies

↑Patients with prolonged (>8 days) ICU stays, longer periods of withdrawal

↑extubation before death

↑ The withdrawal process being well explained

↑ The withdrawal proceeding as expected

↑ Achieving of good symptom control

Important Factors[6]

Palliative Care Consultants

↑Involvement in decision-making

↑ Involvement the dying process

↑ Provider communication

↑ Perceived competence

↑ Early palliative care consultation

Additional information

Negative Indicators

- Physician not spending enough time answering questions
- Family not present at time of death
- Dissatisfaction with information provided about the diagnosis, consequences of illness, and cause of death
- Being notified of death by telephone
- Lower satisfaction with poor symptom control
- Presence of dyspnea

結論

重要影響因素

1. 良好的溝通：表達同理、不放棄；保證提供舒適；書面訊息提供
2. 對於共享決策的支持；評估家屬參與決策的意願
3. 往生時有家屬在旁陪伴
4. 特定的照護品質監測，如：死亡前移除氣管內管

步驟1　研究探討的問題為何？

研究族群 / 問題 (P)	Terminally ill patients or their families
介入措施 (I)	Specific communication strategies
比較 (C)	Usual care
結果 (O)	Family satisfaction with end-of-life care

(治療型PICO)

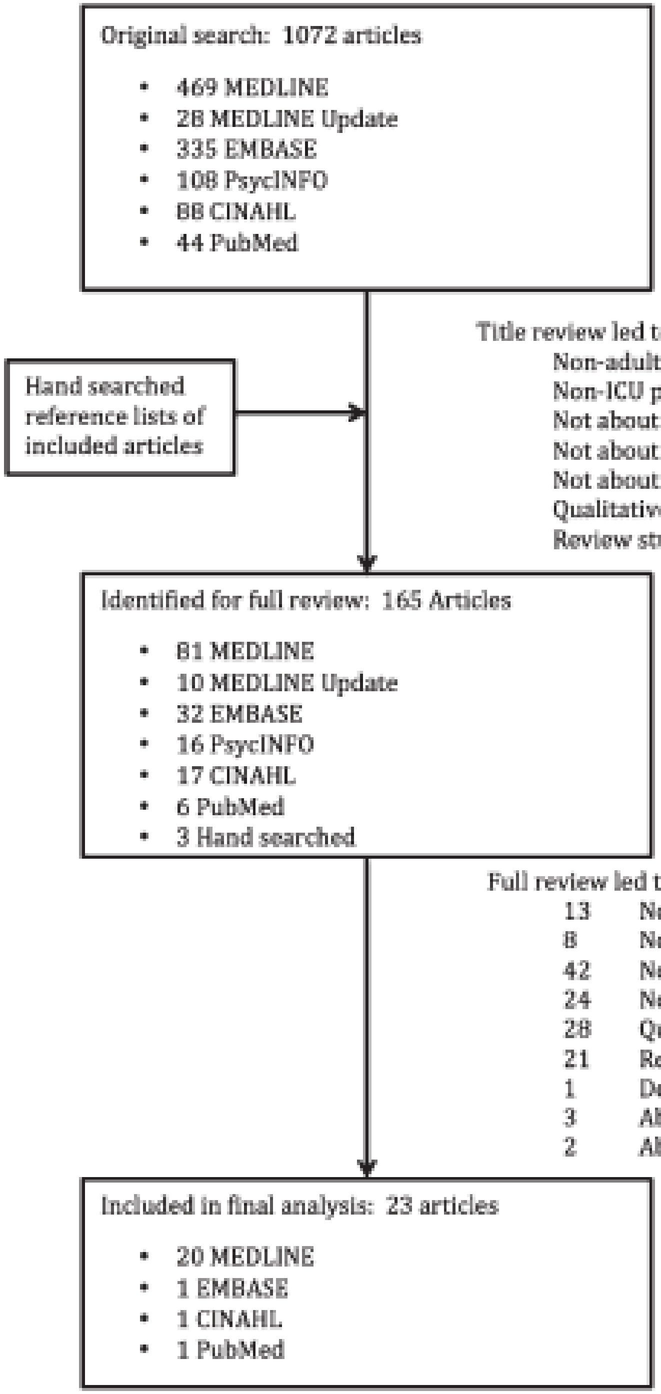
步驟2 系統性文獻回顧的品質如何？(FAITH)

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 **search strategy** (e-Appendix 1) was developed with assistance of a medical research librarian and used to search the following databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), MEDLINE Updated, Excerpta Medical Database (EMBASE), Cumulative Index to Nursing and Allied Health Literature (CINAHL), PsycInfo, and PubMed. Each database was searched from inception through January 2013 for **English-language** articles reporting original data.

評讀結果： □是✓ 否□不清楚



Original search: 1072 articles

- 469 MEDLINE
- 28 MEDLINE Update
- 335 EMBASE
- 108 PsycINFO
- 88 CINAHL
- 44 PubMed

Hand searched reference lists of included articles

Title review led to exclusions:

- Non-adult populations
- Non-ICU populations
- Not about end of life care
- Not about family satisfaction
- Not about factors affecting family satisfaction
- Qualitative study
- Review study

Identified for full review: 165 Articles

- 81 MEDLINE
- 10 MEDLINE Update
- 32 EMBASE
- 16 PsycINFO
- 17 CINAHL
- 6 PubMed
- 3 Hand searched

Full review led to exclusions:

13	Non-ICU populations
8	Not about end of life care
42	Not about family satisfaction
24	Not about factors affecting family satisfaction
28	Qualitative study
21	Review study
1	Description of future study
3	Abstract of subsequently published work
2	Abstract with minimal data

Included in final analysis: 23 articles

- 20 MEDLINE
- 1 EMBASE
- 1 CINAHL
- 1 PubMed

3 RCTs

4 nonrandomized interventions

7 descriptive

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)

Data Extraction and Quality Assessment

All included articles were abstracted using an instrument developed by the authors to sort for study design, key outcomes, and study problems or biases. The abstraction was performed independently by two authors (L. J. H. and A. M. T), and disagreements were resolved by consensus. Study quality was evaluated using a checklist adapted from recommendations of the Consolidated Standards for Reporting Trials (CONSORT) group.

評讀結果：✓是□ 否□不清楚

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。

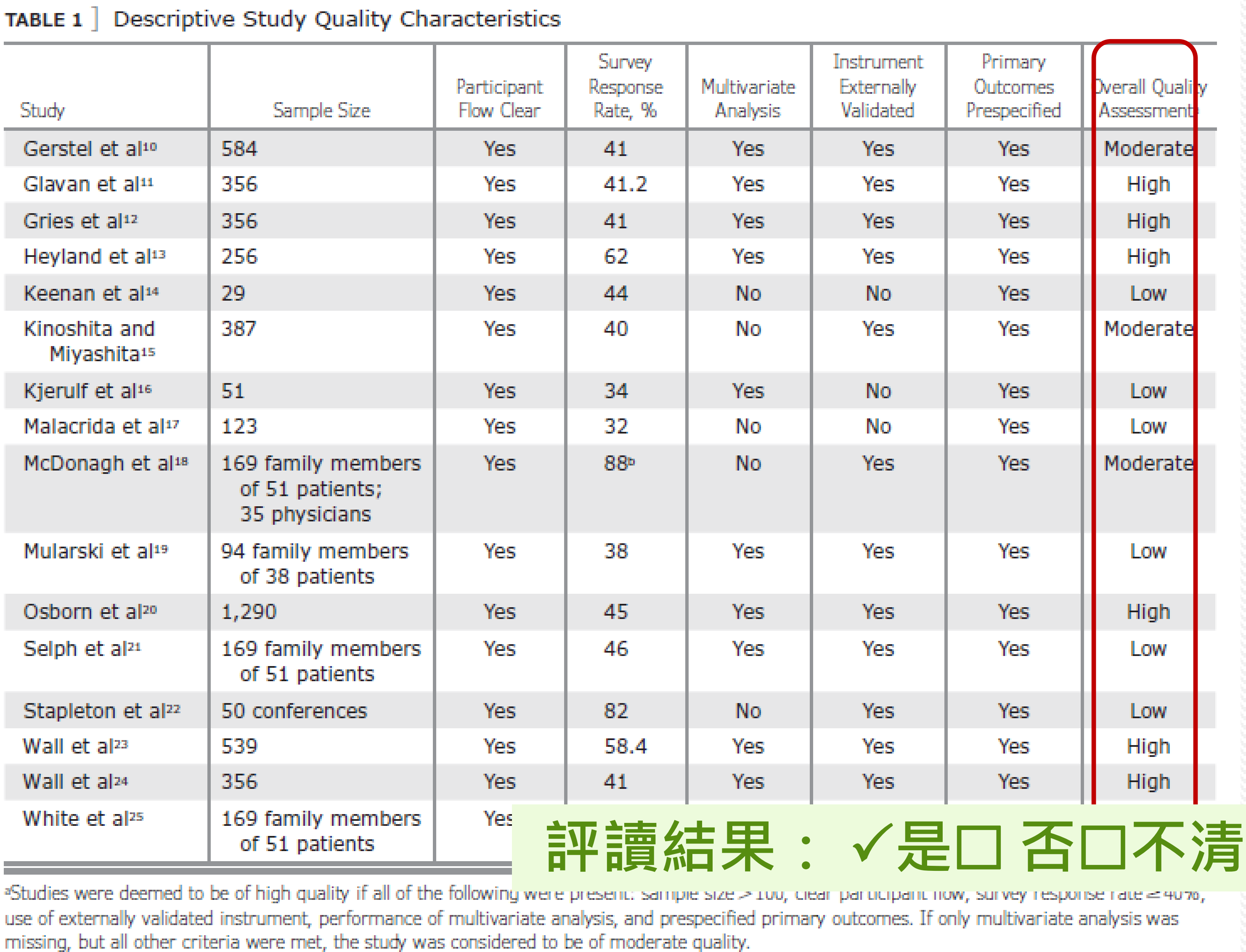


TABLE 1] Descriptive Study Quality Characteristics

Study	Sample Size	Participant Flow Clear	Survey Response Rate, %	Multivariate Analysis	Instrument Externally Validated	Primary Outcomes Prespecified	Overall Quality Assessment
Gerstel et al[10]	584	Yes	41	Yes	Yes	Yes	Moderate
Glavan et al[11]	356	Yes	41.2	Yes	Yes	Yes	High
Gries et al[12]	356	Yes	41	Yes	Yes	Yes	High
Heyland et al[13]	256	Yes	62	Yes	Yes	Yes	High
Keenan et al[14]	29	Yes	44	No	No	Yes	Low
Kinoshita and Miyashita[15]	387	Yes	40	No	Yes	Yes	Moderate
Kjerulf et al[16]	51	Yes	34	Yes	No	Yes	Low
Malacrida et al[17]	123	Yes	32	No	No	Yes	Low
McDonagh et al[18]	169 family members of 51 patients; 35 physicians	Yes	88[b]	No	Yes	Yes	Moderate
Mularski et al[19]	94 family members of 38 patients	Yes	38	Yes	Yes	Yes	Low
Osborn et al[20]	1,290	Yes	45	Yes	Yes	Yes	High
Selph et al[21]	169 family members of 51 patients	Yes	46	Yes	Yes	Yes	Low
Stapleton et al[22]	50 conferences	Yes	82	No	Yes	Yes	Low
Wall et al[23]	539	Yes	58.4	Yes	Yes	Yes	High
Wall et al[24]	356	Yes	41	Yes	Yes	Yes	High
White et al[25]	169 family members of 51 patients	Yes					

[a] Studies were deemed to be of high quality if all of the following were present: sample size > 100, clear participant flow, survey response rate ≥ 40%, use of externally validated instrument, performance of multivariate analysis, and prespecified primary outcomes. If only multivariate analysis was missing, but all other criteria were met, the study was considered to be of moderate quality.

評讀結果：✓是□ 否□不清楚

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

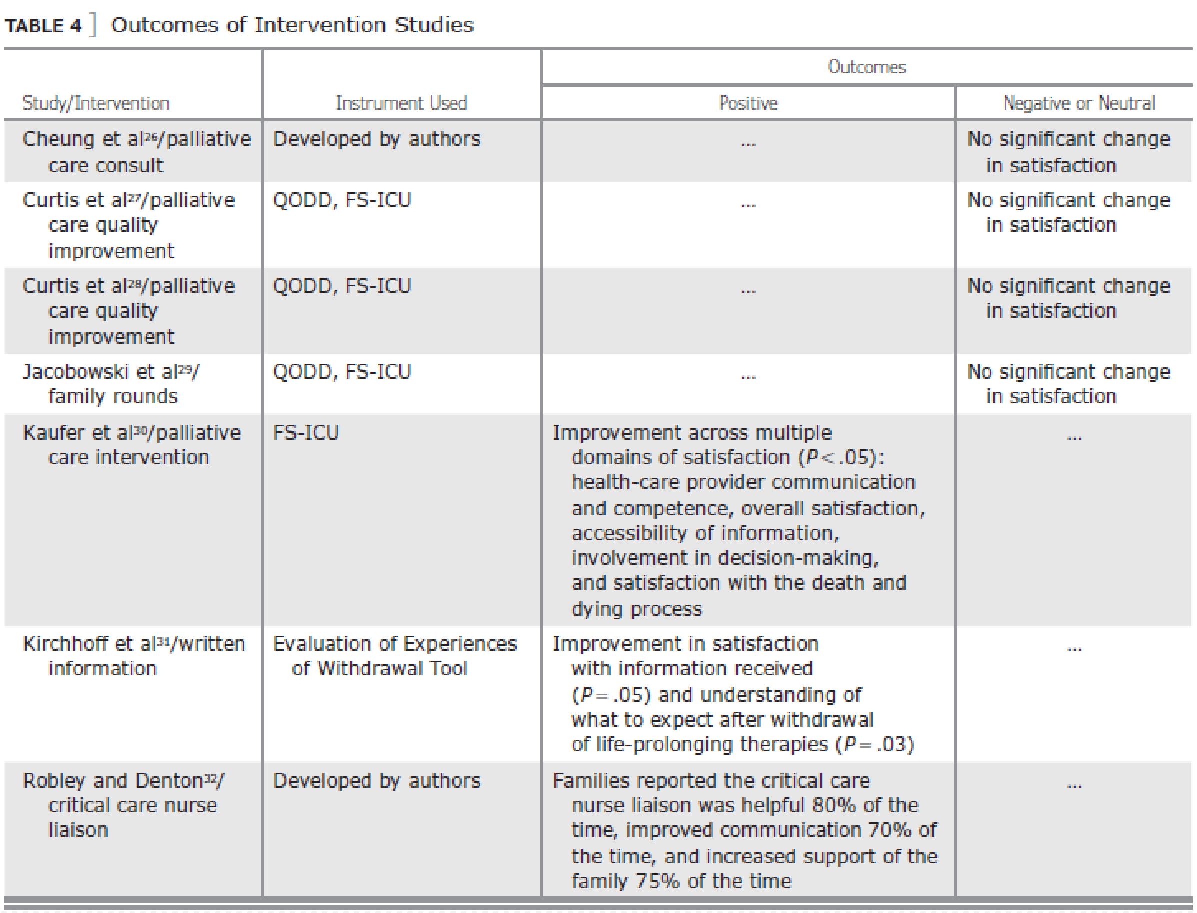


TABLE 4 Outcomes of Intervention Studies

Study/Intervention	Instrument Used	Outcomes: Positive	Outcomes: Negative or Neutral
Cheung et al[26]/palliative care consult	Developed by authors	...	No significant change in satisfaction
Curtis et al[27]/palliative care quality improvement	QODD, FS-ICU	...	No significant change in satisfaction
Curtis et al[28]/palliative care quality improvement	QODD, FS-ICU	...	No significant change in satisfaction
Jacobowski et al[29]/family rounds	QODD, FS-ICU	...	No significant change in satisfaction
Kaufer et al[30]/palliative care intervention	FS-ICU	Improvement across multiple domains of satisfaction ($P < .05$): health-care provider communication and competence, overall satisfaction, accessibility of information, involvement in decision-making, and satisfaction with the death and dying process	...
Kirchhoff et al[31]/written information	Evaluation of Experiences of Withdrawal Tool	Improvement in satisfaction with information received ($P = .05$) and understanding of what to expect after withdrawal of life-prolonging therapies ($P = .03$)	...
Robley and Denton[32]/critical care nurse liaison	Developed by authors	Families reported the critical care nurse liaison was helpful 80% of the time, improved communication 70% of the time, and increased support of the family 75% of the time	...

評讀結果：✓是□ 否□不清楚

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。

The included studies have significant limitations

- No single, widely accepted, standardized satisfaction outcome measure
- Majorities were relatively low survey response rates, introducing the potential for self-selection bias
- Lacking external validation, which may limit validity of findings
- None of the surveys had established significant score changes, hindering interpretation of the results
- Minorities were underrepresented in most studies limiting generalizability

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）？

Our ability to **make conclusive recommendations** regarding how to best impact family satisfaction with end-of-life care in the ICU is **limited** by a **lack of robust, interventional studies** on the topic.

- Good communication
- Extubation before death
- Comfort care
- Shared decision-making
- Palliative care consultations
- Provision of written information

台灣的現況[1]

- 北部2所醫學中心收案，137份問卷
- 測量工具：Quality of Dying and Death (QODD)
- **九成以上**家屬表示醫師有和他們討論病情，但**四成**表示了解困難、**五成**以上希望獲得更多的訊息
- **溝通滿意度**與生命末期照護評價無顯著差異
- 疼痛控制、呼吸舒適、維持尊嚴、掌控環境、與親人一起、離去前看起來安詳與照護評價有顯著相關性

‾洪韡倢(2008)·家屬對外科加護病房生命末期照護評價與心肺復甦術決策的探討·未發表碩士論文·台北：台北護理學院護理研究所。

台灣的現況[2]

- 台北某醫學中心外科加護病房收案，50位個案
- 對加護病房滿意前三項：護理人員的技術與能力、護理人員溝通、工作人員對病患的態度
- 不滿意：家屬休息室的氣氛
- 影響整體照護滿意度**重要因素**：**對病患的態度**和**護理人員的技術與能力**
- 80%表示獲得足夠的資訊且有時間考慮決策

周燕玉(2006)·簽署不心肺復甦術同意書病患家屬對加護病房照護與醫療決策過程滿意度之初探·未發表碩士論文·台北：台灣大學護理研究所。

討論問題

- 依前述國內的研究結果，大多數家屬皆曾與醫師病情討論，但近半數無法理解討論內容，顯見病情告知及溝通技巧仍須加強
- 為數不少的醫護人員曾經歷親屬在臨終照護決策的無助與驚慌，顯示目前醫療機構在臨終照護並無具體完整的照護模式，多數醫護人員亦未有完整的教育訓練

討論

照護加護病房生命末期病人時，採行共享式決策、書面資訊提供等措施能否增進家屬對醫療照護滿意度?

Thank you for your attention~