EBM Journal Club

Hospice/palliative care Complementary and Alternative Medicine

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報告日期：105.01.20

OUTLINE

- Background
- Scenario
- Ask(PICO)
- Aquire
- Appraisal
- Apply
- Audit

EBM (Evidence-based Medicine)

- **實證醫學**

→從龐大的醫學資料庫中**搜尋**相關文獻

→以流行病學及統計學方法**過濾**出值得信賴的文獻

→再經過嚴格**評讀**及綜合分析後

→將獲取之最佳研究證據（evidence）、臨床經驗（experience）及患者期望（expectation）相互**整合**

→**配合**診療情境後制定出一套最佳的臨床醫療決策，並可用來協助醫護人員進行終身學習。

臨終關懷------認識安寧療護(Hospice)

- 「Hospice」一詞源自於中世紀之收容所，原是供朝聖者或長程旅行者休養體力之中途驛站，同時也提供照顧給孤兒、窮人、病人與瀕死患者。
- 至十九世紀晚期，西方許多國家設立安寧療護機構專職照顧瀕死患者。

『安寧療護』的發展(Hospice Development)

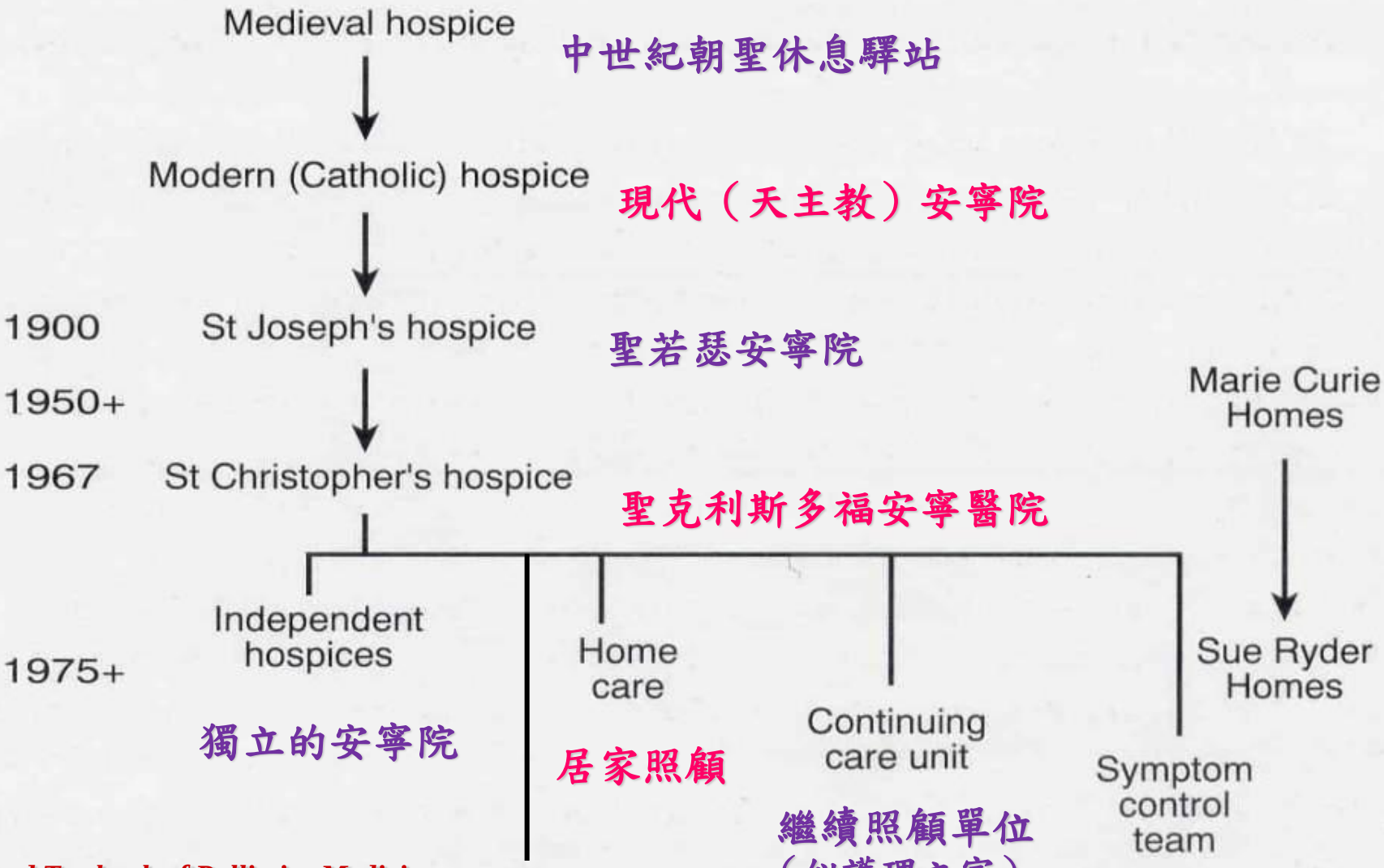


Fig. 1 Hospice development.

Oxford Textbook of Palliative Medicine – Dr. Cicely Saunders

日間照顧(Day care)　　症狀控制小組

安寧療護的定義(WHO-1990)

- 對於治癒性治療已經沒有反應和利益的末期病人，進行積極整體的照顧，包括疼痛控制與其他症狀的緩解，以及對心理、家庭、靈性各層面問題的處理。
- 安寧療護的目標是協助病人與其家屬獲得最佳的生活品質。
- 安寧療護並不是放棄治療，而是治療的目標從疾病轉向症狀。
- 安寧療護是一種高專業醫療加上高品質服務的臨終照顧方法，目前在國外已經發展成熟，且形成緩和醫學（ Palliative medicine ）之專科。

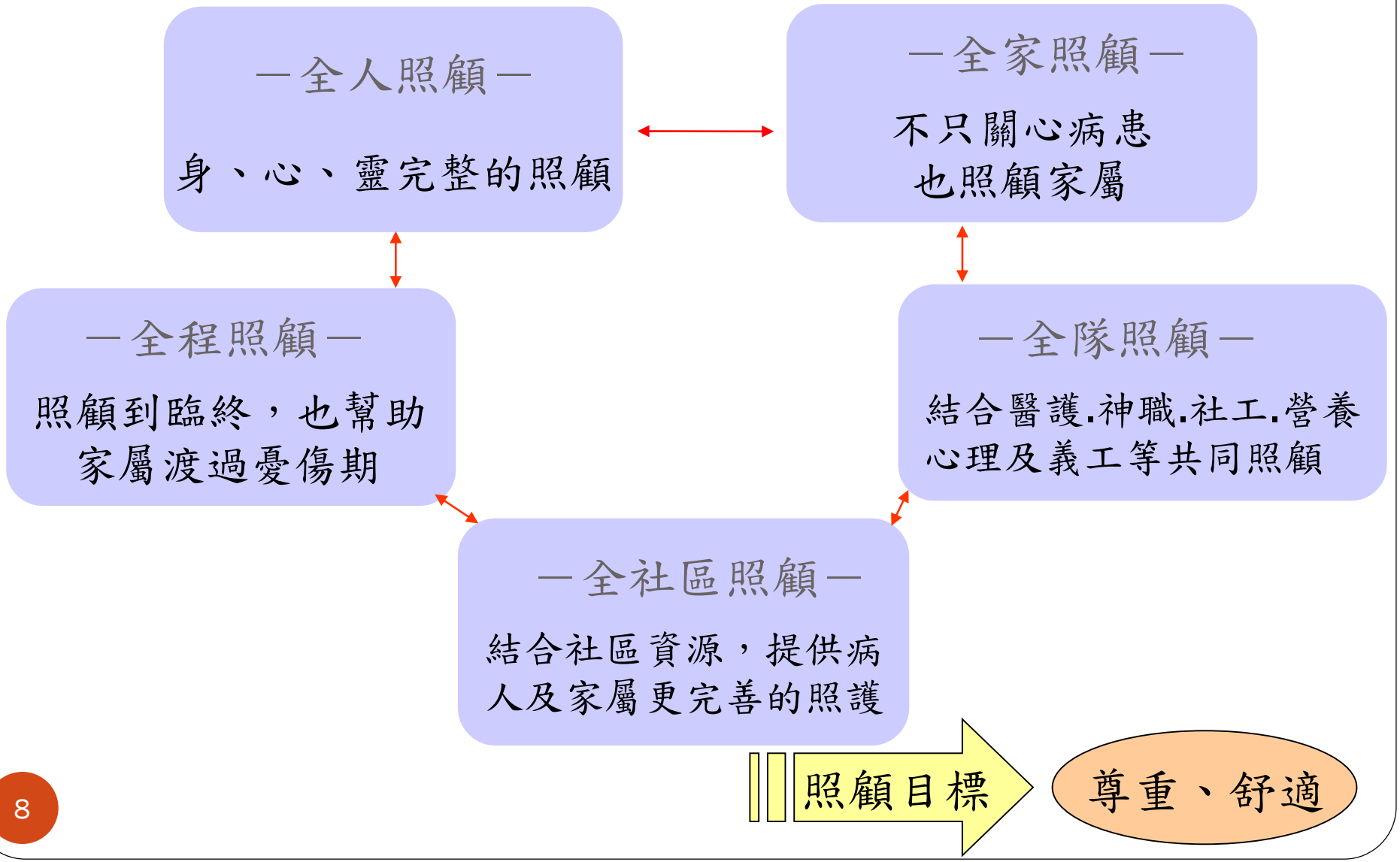
緩和醫療照顧(Palliative Care)定義
(WHO, 2002)

- 對象：病人及其家屬
- 疾病種類及病程：威脅生命的疾病
- 治療模式：預防及緩解；早期辨認；完善評估；全人治療；團隊力量；提供支持系統。
- 治療目標：改善生活品質；正面影響病程；治療疼痛及其他症狀；家屬哀傷及其他困難。

  →提供病人**疼痛及身、心、靈等痛苦症狀的緩解**；並協助家屬在病患的臨終期及往生後哀傷期的調適(悲傷輔導 Bereavement)。
- 對病人死亡之態度：積極；陪伴；不加速不拖延；尊重生命的自然性。

National cancer control programs: Policies and managerial guidelines. 2nd ed. Geneva. World Health Organization 2002.

安寧療護五全照顧


—全人照顧—
身、心、靈完整的照顧
—全家照顧—
不只關心病患
也照顧家屬
—全程照顧—
照顧到臨終，也幫助
家屬渡過憂傷期
—全隊照顧—
結合醫護.神職.社工.營養
心理及義工等共同照顧
—全社區照顧—
結合社區資源，提供病
人及家屬更完善的照護
照顧目標
尊重、舒適

臨終常見症狀

- 疼痛問題
- 疲倦、呼吸困難
- 噁心嘔吐
- 厭食(anorexia)、消瘦、惡體質(cachexia)
- 便秘
- 淋巴水腫
- 口腔照顧

臨終時期治療原則

- 身、心、靈的陪伴與治療。
- 以當下滿意為原則。
- 三分身七分心：三分力量在身體症狀減緩症狀減緩，七分在心理，靈性方面的陪伴。

Don’t wait... 不要等待

因爲，
你不知道等待
需要花費多少
的時間

Because you don’t know how long it will take.

Scenario

- 一位55歲男性患者，具B肝帶原病史、長期應酬飲酒生活史，去年診斷HCC，Child-Pugh B，接受過肝動脈栓塞化療，療效不顯病程持續進展，現肝癌末期Child-Pugh C，與家屬討論後轉至Hospice機構希望減輕其痛苦以善終。
- 於Hospice機構接受西醫常規安寧療護，但仍常感疲倦、噁心嘔吐、納差、腹部疼痛明顯，影響生活品質，其家屬至中醫門診詢問醫師:中醫各種療法如中藥、針灸、推拿或是輔助替代療法是否能幫助減輕其不適?使生活品質提升。

執行實證醫學五大步驟

- 提出問題(Ask: PICO)
  - Formulate an answerable question
- 搜尋證據(Acquire)
  - Track down the best evidence
- 嚴格評讀(Appraisal: VIP)
  - Critically appraise the evidence
- 恰當應用(Apply: 3E)
  - Integrate with clinical expertise and patient values
- 評估結果(Audit)
  - Monitoring your performance

Step 1:Asking

提問

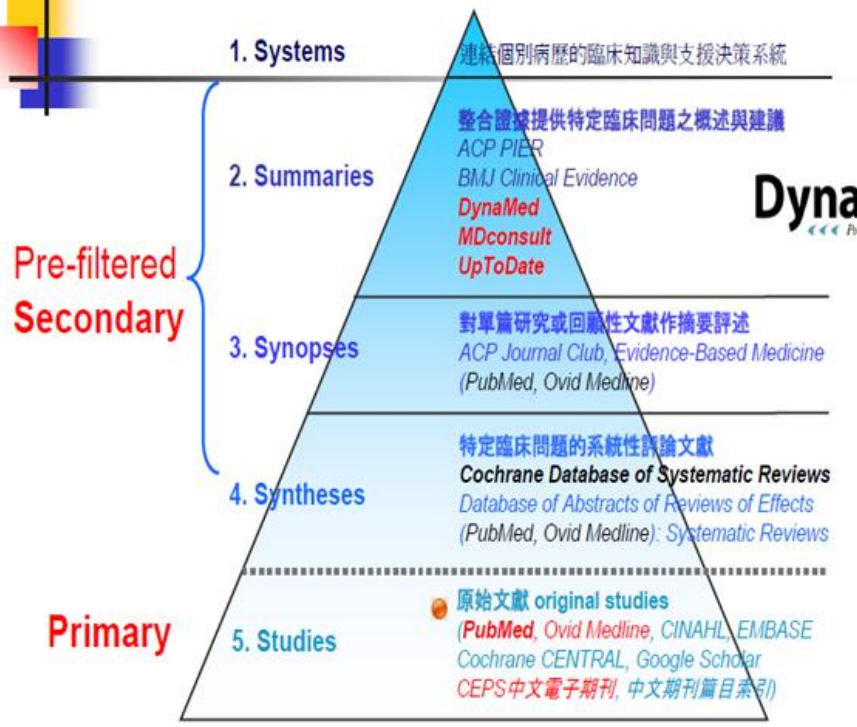
Problem 病人問題	Hospice/palliative care of cancer-related symptoms
Intervention 介入處置	complementary/ alternative medicine (CAM)
Comparison 對照的處置	conventional care options
Outcome 臨床結果	cancer-related symptoms /quality of life

Step 2:Acquire

提問

搜尋

5S EBM Resources (非關證據強弱!)



Model from: Haynes, R. B. (2006). Of studies, syntheses, synopses, summaries, and systems: the "5S" evolution of information services for evidence-based health care decisions. ACP Journal Club, 145(3), A8.

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THE COCHRANE LIBRARY

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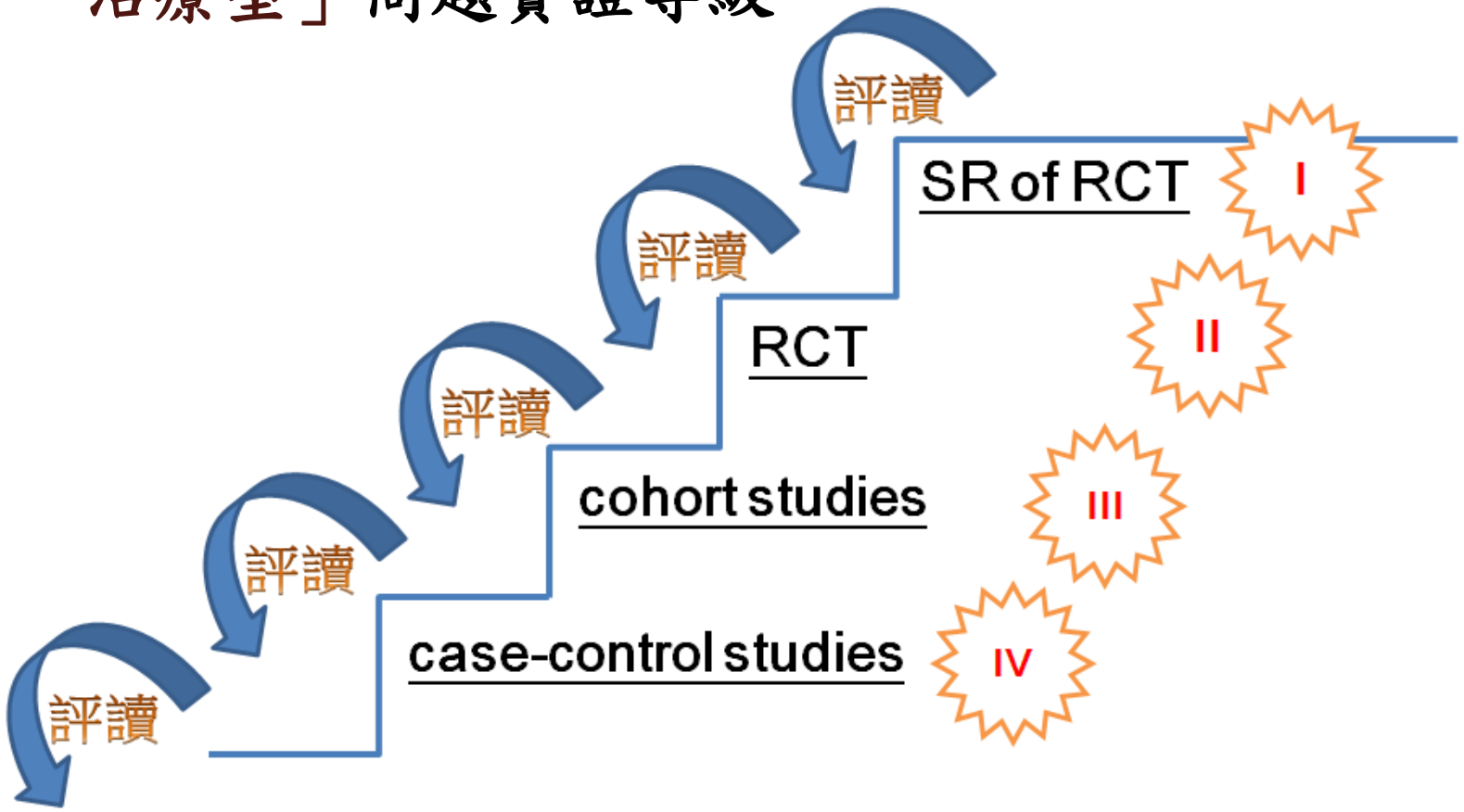
CENTRAL THE COCHRANE COLLABORATION

- **Search keywords**
  - ✓Hospice
  - ✓Palliative
  - ✓Complementary and Alternative Medicine

MeSH

Search Strategy

- 「治療型」問題實證等級



Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence

Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
How common is the problem?	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	Case-series**	n/a
Is this diagnostic or monitoring test accurate? (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	Individual cross sectional studies with consistently applied reference standard and blinding	Non-consecutive studies, or studies without consistently applied reference standards**	Case-control studies, or "poor or non-independent reference standard**	Mechanism-based reasoning
What will happen if we do not add a therapy? (Prognosis)	Systematic review of inception cohort studies	Inception cohort studies	Cohort study or control arm of randomized trial*	Case-series or case-control studies, or poor quality prognostic cohort study**	n/a
Does this intervention help? (Treatment Benefits)	Systematic review of randomized trials or *n*-of-1 trials	Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study**	Case-series, case-control studies, or historically controlled studies**	Mechanism-based reasoning
What are the COMMON harms? (Treatment Harms)	Systematic review of randomized trials, systematic review of nested case-control studies, *n*-of-1 trial with the patient you are raising the question about, or observational study with dramatic effect	Individual randomized trial or (exceptionally) observational study with dramatic effect	Non-randomized controlled cohort/follow-up study (post-marketing surveillance) provided there are sufficient numbers to rule out a common harm. (For long-term harms the duration of follow-up must be sufficient.)**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning
What are the RARE harms? (Treatment Harms)	Systematic review of randomized trials or *n*-of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect			
Is this (early detection) test worthwhile? (Screening)	Systematic review of randomized trials	Randomized trial	Non -randomized controlled cohort/follow-up study**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning

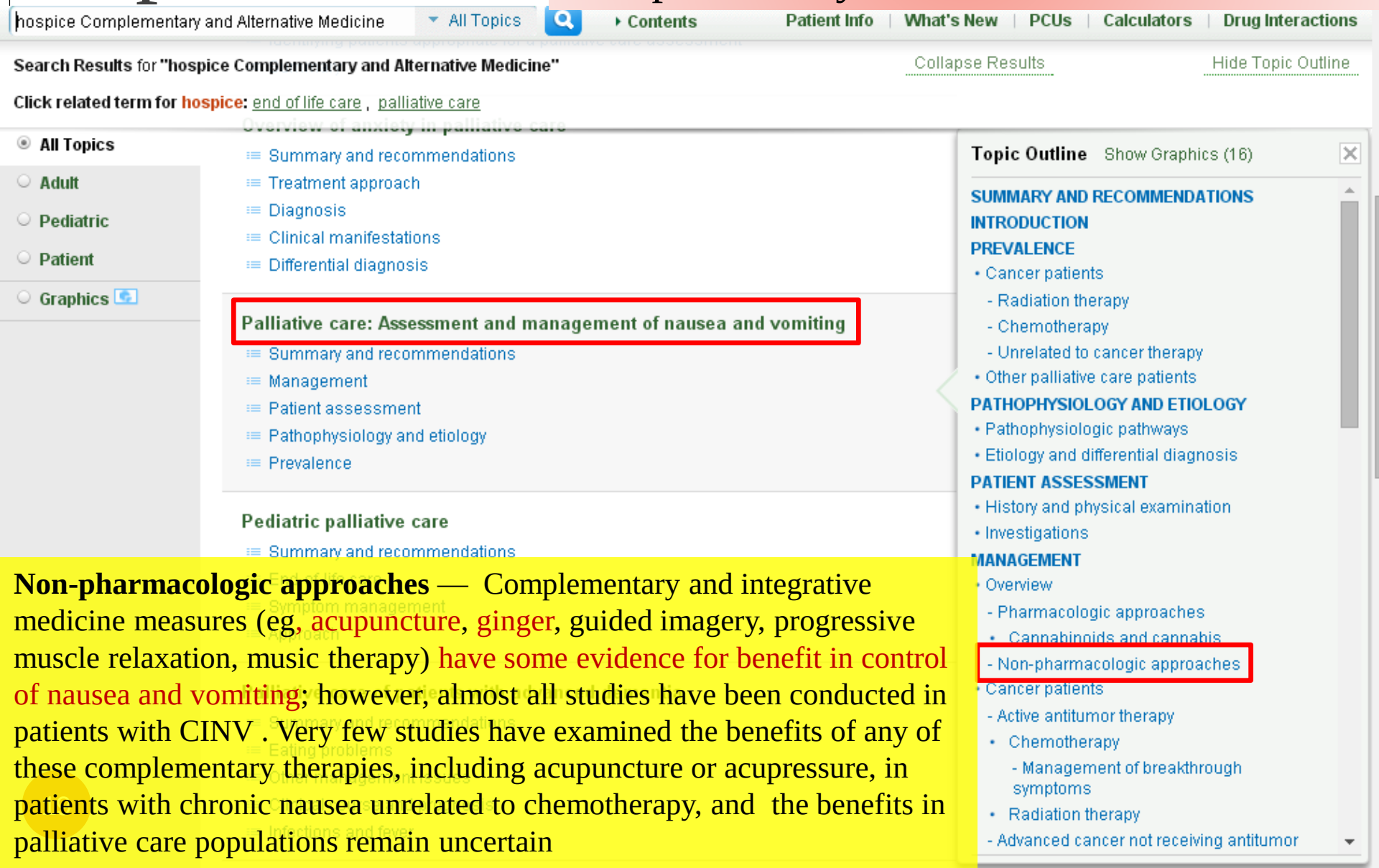
*** Level may be graded down on the basis of study quality, imprecision, indirectness (study PICO does not match questions PICO), because of inconsistency between studies, or because the absolute effect size is very small; Level may be graded up if there is a large or very large effect size.**

**** As always, a systematic review is generally better than an individual study.**

Oxford Centre for Evidence-Based Medicine. http://www.cebm.net/index.aspx?o=5653 ***2011***

UptoDate

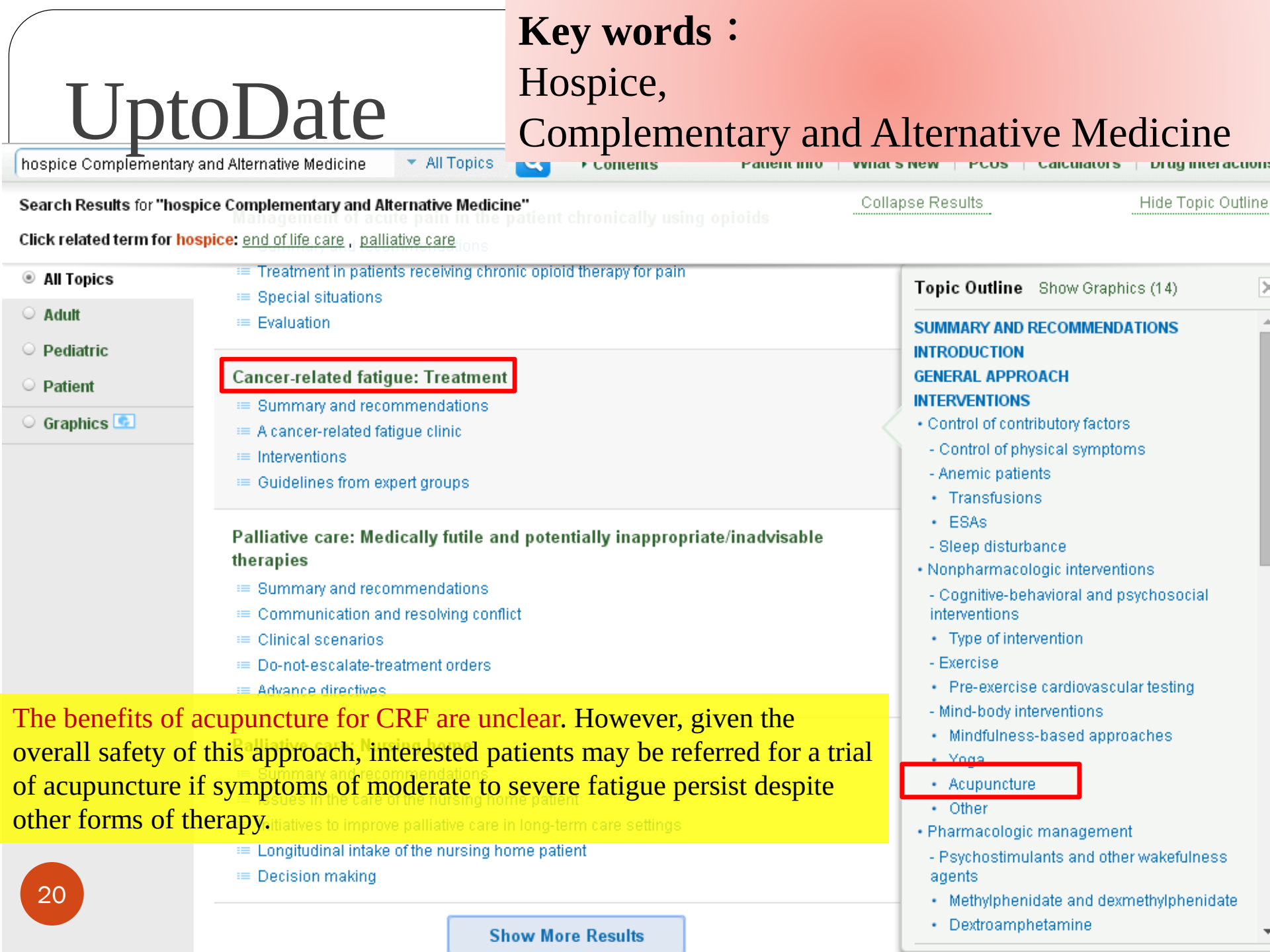
Key words：
Hospice,
Complementary and Alternative Medicine



Non-pharmacologic approaches — Complementary and integrative medicine measures (eg, acupuncture, ginger, guided imagery, progressive muscle relaxation, music therapy) have some evidence for benefit in control of nausea and vomiting; however, almost all studies have been conducted in patients with CINV . Very few studies have examined the benefits of any of these complementary therapies, including acupuncture or acupressure, in patients with chronic nausea unrelated to chemotherapy, and the benefits in palliative care populations remain uncertain

UptoDate

Key words：
Hospice,
Complementary and Alternative Medicine



The benefits of acupuncture for CRF are unclear. However, given the overall safety of this approach, interested patients may be referred for a trial of acupuncture if symptoms of moderate to severe fatigue persist despite other forms of therapy.

Dynamed

Key words：
Hospice,Complementary ,Alternative Medicine
Palliative,Complementary ,Alternative Medicine

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Hospice Complementary Alternative Medicine 檢索

結果清單 2 之 3 Expand All | Collapse All | A A

Cancer pain

Treatments for Bone Pain
Invasive Pain Management
Complementary Therapies

Acupuncture:

- **acupuncture may reduce cancer-related pain (level 2 [mid-level] evidence)**
  - based on Cochrane review with limited evidence
  - systematic review of 5 randomized trials evaluating acupuncture in 285 adults with cancer pain
  - 3 trials compared true acupuncture to sham
    - 2 courses of ear needle acupuncture significantly decreased mean pain intensity at 1-2 months vs. sham ear acupuncture or ear seeds in
    - 3 daily sessions of electroacupuncture significantly decreased mean pain intensity up to 2 days post treatment vs. sham in 1 trial with 60
    - no significant difference in mean pain scores comparing electroacupuncture (2-3 times per week for 10 sessions) vs. sham electroacupur with 21 women with recurrent ovarian or peritoneal cancer, uterine cancer, or tumors of fallopian tubes
  - 2 trials compared acupuncture to oral analgesia
    - ≥ 31% reduction in pain intensity in 94.1% with acupuncture vs. 87.5% with oral analgesic medication (according to World Health Org ($p < 0.05$, NNT 16) in 1 trial with 66 adults with late but unspecified cancer
    - analgesia according to WHO guidelines significantly decreased analgesic consumption vs. filiform needle or point injection acupuncture treatment but no significant differences at other timepoints in 1 trial with 48 adults with stomach carcinoma
  - trials either did not report adverse events or reported that there were no adverse events resulting treatment
  - Reference - Cochrane Database Syst Rev 2015 Oct 15;(10):CD007753

Hypnotherapy:

- **hypnotherapy may be associated with pain reduction in advanced cancer (level 2 [mid-level] evidence)**
  - based on systematic review of studies with limited methodological quality
  - systematic review of 27 studies (1 randomized trial, 1 observational study, 1 retrospective questionnaire, 24 case reports) with 199 patients with
  - in randomized trial of 50 patients, hypnotherapy associated with reductions in

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Genetics & longevity: Author M Levine replies to D Himmelstein (@dhimmel) regarding study's discovery phase. 1.usa.gov/1NsSpTA

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- Single Citation Matcher
- Batch Citation Matcher
- Clinical Queries

More Resources

- MeSH Database
- Journals in NCBI Databases
- Clinical Trials
- E-Utilities (API)

Key words：
Hospice,
Complementary ,Alternative Medicine

NCBI Resources How To

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.

Hospice, Complementary,Alternative Medicine Search

Clinical Study Categories

Category: Therapy

Scope: Broad

Results: 5 of 17

Massage, Music, and Art Therapy in Hospice: Results of a National Survey.
Dain AS, Bradley EH, Hurzeler R, Aldridge MD.
J Pain Symptom Manage. 2015 Jun; 49(6):1035-41. Epub 2014 Dec 30.

Open-label uncontrolled pilot study to evaluate complementary therapy with Ruta graveolens 9c in patients with advanced cancer.
Freyer G, You B, Villet S, Tartas S, Fournel-Federico C, Trillet-Lenoir V, Hamizi S, Colomban O, Chavernoz N, Falandry C.
Homeopathy. 2014 Oct; 103(4):232-8. Epub 2014 Jul 30.

Why people accept opioids: role of general attitudes toward drugs, experience as a bereaved family, information from medical professionals, and personal beliefs regarding a good death.
Shinjo T, Morita T, Hirai K, Miyashita M, Shimizu M, Tsuneto S, Shima Y.
J Pain Symptom Manage. 2015 Jan; 49(1):45-54. Epub 2014 Jun 12.

Systematic Reviews

Results: 5 of 7

Palliative care research on the island of Ireland over the last decade: a systematic review and thematic analysis of peer reviewed publications.
McIlfatrick SJ, Murphy T.
BMC Palliat Care. 2013 Sep 4; 12(1):33. Epub 2013 Sep 4.

Reflexology for symptom relief in patients with cancer.
Wilkinson S, Lockhart K, Gambles M, Storey L.
Cancer Nurs. 2008 Sep-Oct; 31(5):354-60; quiz 361-2.

Therapeutic pluralism? Evidence, power and legitimacy in UK cancer services.
Broom A, Tovey P.
Sociol Health Illn. 2007 May; 29(4):551-69.

Coordinating integrated services: a pilot study with participants of a co-ordinators course.
Halpin M.
Complement Ther Clin Pract. 2006 May; 12(2):156-62.

The increasing use of reiki as a complementary therapy in specialist palliative care.

Medical Genetics

Topic: All

Result:
三篇符合主題,
但無提供全文
下載

Key words：
Palliative,
Complementary,Alternative Medicine

NCBI Resources How To

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.

palliative,Complementary,Alternative Medicine Search

Clinical Study Categories

Category: Therapy

Scope: Broad

Results: 5 of 115

Efficacy and safety of an amino acid jelly containing coenzyme Q10 and L-carnitine in controlling fatigue in breast cancer patients receiving chemotherapy: a multi-institutional, randomized, exploratory trial (JORTC-CAM01).

Iwase S, Kawaguchi T, Yotsumoto D, Doi T, Miyara K, Odagiri H, Kitamura K, Ariyoshi K, Miyaji T, Ishiki H, et al.
Support Care Cancer. 2016 Feb; 24(2):637-46. Epub 2015 Jun 24.

L-carnitine supplementation in patients with HIV/AIDS and fatigue: a double-blind, placebo-controlled pilot study.

Cruciani RA, Revuelta M, Dvorkin E, Homel P, Lesage P, Esteban-Cruciani N.
HIV AIDS (Auckl). 2015; 7:65-73. Epub 2015 Feb 19.

Cancer induced bone pain.

Kane CM, Hoskin P, Bennett MI.
BMJ. 2015 Jan 29; 350:h315. Epub 2015 Jan 29.

Music therapy to promote psychological and physiological relaxation in palliative care patients: protocol of a randomized controlled trial.

Systematic Reviews

Results: 5 of 49

Effectiveness of acupuncture and related therapies for palliative care of cancer: overview of systematic reviews.

Wu X, Chung VCh, Hui EP, Ziea ET, Ng BF, Ho RS, Tsoi KK, Wo SY, Wu JC.
Sci Rep. 2015 Nov 26; 5:16776. Epub 2015 Nov 26.

Music therapy to promote psychological and physiological relaxation in palliative care patients: protocol of a randomi e controlled trial.

Warth M, Kessler J, Koenig J, Wormit AF, Hillecke TK, Bardenheuer HJ.
BMC Palliat Care. 2014; 13(1):60. Epub 2014 Dec 17.

Decision-making about complementary and alternative medicine by cancer patients: integrative literature review.

Weeks L, Balneaves LG, Paterson C, Verhoef M.
Open Med. 2014; 8(2):e54-66. Epub 2014 Apr 15.

Attitudes of members of the German Society for Palliative Medicine toward complementary and alternative medicine or cancer patients.

Medical Genetics

Topic: All

The problem of intractability: medical therapies in epilepsy.

Jallon P.
Epilepsia. 1997; 38 Suppl 9:S3

This column displays citations p genetics. See more filter informa

Result:
六篇符合主題
且全文可下載

Key words：
Hospice,
Complementary ,Alternative Medicine

Result:
兩篇符合主題
且全文可下載

Step 3:Appraisal

- VIP
  - Validity
  - Impact
  - Practice Applicability

Step 3:Appraisal

OPEN

Effectiveness of acupuncture and related therapies for palliative care of cancer: overview of systematic reviews

Received: 18 March 2015
Accepted: 16 October 2015
Published: 26 November 2015

Xinyin Wu[1,2], Vincent CH Chung[1,2], Edwin P Hui[1,3], Eric TC Ziea[4], Bacon FL Ng[4], Robin ST Ho[2], Kelvin KF Tsoi[2,5], Samuel YS Wong[1,2] & Justin CY Wu[1,6]

- Oxford CEBM Critical Appraisal Sheets (for systematic review)

  1.此篇系統回顧是否提出明確定義的問題？

  2.是否此篇回顧的搜尋策略可能有遺漏可能合適的臨床試驗？

  3-1.研究收錄標準是否有明確的界定？

  3-2.關於研究族群、涉入治療、比較分組及結果評估是否適切？

  4.所收錄的研究是否是有效力(valid)的研究？

  5.如果有**meta-analysis**，所收錄的研究是否有足夠的一致性以產生合併的資料？

1. 此篇系統回顧是否提出明確定義的問題？(PICO)

SYSTEMATIC REVIEW: Are the results of the review valid?

What question (PICO) did the systematic review address?	
What is best?	Where do I find the information?
The main question being addressed should be clearly stated. The exposure, such as a therapy or diagnostic test, and the outcome(s) of interest will often be expressed in terms of a simple relationship.	The ***Title, Abstract*** *or final paragraph of the* ***Introduction*** should clearly state the question. If you still cannot ascertain what the focused question is after reading these sections, search for another paper!
This paper: Yes ☐ No ☐ Unclear ☐ Comment:	

Problem 病人問題，Intervention 介入處置，Comparison 對照處置，Outcome 臨床結果

Intervention

- Title

Effectiveness of acupuncture and related therapies for palliative care of cancer: overview of systematic reviews

- Abstract

Problem

Acupuncture and related therapies such as moxibustion and transcutaneous electrical nerve stimulation are often used to manage cancer-related symptoms, but their effectiveness and safety are controversial. We conducted this overview to summarise the evidence on acupuncture for palliative care of cancer. Our systematic review synthesised the results from clinical trials of patients with any type of cancer. The methodological quality of the 23 systematic reviews in this overview, assessed using the Methodological Quality of Systematic Reviews Instrument, was found to be satisfactory. There is evidence for the therapeutic effects of acupuncture for the management of cancer-related fatigue, chemotherapy-induced nausea and vomiting and leucopenia in patients with cancer. There is conflicting evidence regarding the treatment of cancer-related pain, hot flashes and hiccups, and improving patients' quality of life. The available evidence is currently insufficient to support or refute the potential of acupuncture and related therapies in the management of xerostomia, dyspnea and lymphedema and in the improvement of psychological well-be[illegible]. No

- Interventions & control treatments

Yes

No

For control treatments,we included SRs that summarised studies that included any type of intervention without acupunctureor the related treatments described above. These interventions included conventional treatment, behavioural therapy, Chinese herbal medicine treatment, sham acupuncture, addition to a waiting list or no treatment.

Comparison

2. 此篇回顧的搜尋策略是否可能遺漏可能合適的臨床試驗？

F - Is it unlikely that important, relevant studies were missed?	
What is best?	Where do I find the information?
The starting point for comprehensive search for all relevant studies is the major bibliographic databases (e.g., Medline, Cochrane, EMBASE, etc) but should also include a search of reference lists from relevant studies, and contact with experts, particularly to inquire about unpublished studies. The search should not be limited to English language only. The search strategy should include both MESH terms and text words.	The ***Methods*** section should describe the search strategy, including the terms used, in some detail. The ***Results*** section will outline the number of titles and abstracts reviewed, the number of full-text studies retrieved, and the number of studies excluded together with the reasons for exclusion. This information may be presented in a figure or flow chart.
This paper: Yes ☐ No ☐ Unclear ☐ Comment:	

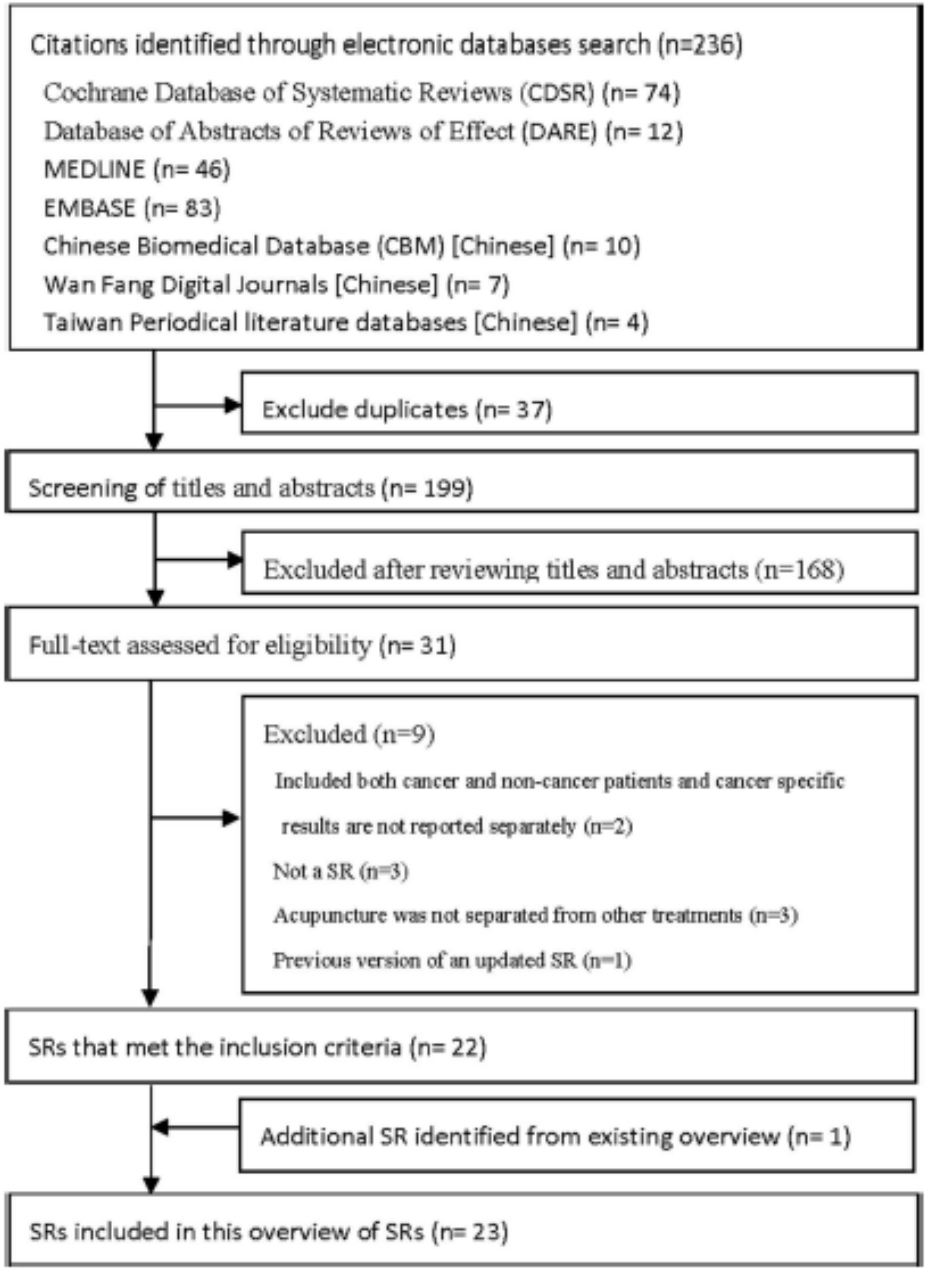
2. 此篇回顧的搜尋策略是否可能遺漏可能合適的臨床試驗？

Literature search. We searched four international databases (MEDLINE, EMBASE, the Cochrane Database of Systematic Reviews and the Database of Abstracts of Reviews of Effect) and three Chinese databases (Chinese Biomedical Databases, Wan Fang Digital Journals and Taiwan Periodical Literature Databases) from their inception through July 2014 to identify potential SRs. For MEDLINE and EMBASE, a specialised search filter for SR articles was used[53,54]. Comprehensive searches of each database with a full Boolean search strategy were conducted, and the details are reported in Appendix 1.

Characteristics of included SRs.

Sixteen SRs summarised the evidence on a single outcome, including CRP[8,13,21,22,26,27], fatigue[9,24,31], hot flashes[17,18], chemotherapy-induced nausea and vomiting (CINV)[14,20], hiccups[29] and irradiation-induced xerostomia[19]. The remaining seven SRs[6,7,12,20,28,30,32] reported evidence on a wide range of outcomes in the palliative care of patients with cancer. The characteristics of these SRs can be found in Tables 1–3. Table 1 describes the SRs that included only RCTs on needle acupuncture. Table 2 reports the SRs that included RCTs that focused on acupuncture-related therapies. Table 3 highlights the SRs that included results from various study designs on both needle acupuncture and related therapies. The methodological quality of

- **搜尋的資料庫遺漏CKNI**
- 明確指出搜尋方式及關鍵字，且未受到語言限制
- 有明確Mesh term



有註明**回顧論文總數量、排除數量及原因**

Figure 1. Flowchart of literature selection on systematic reviews of acupuncture for cancer palliative care Keys: SR, systematic review.

3-1. 研究收錄標準是否有明確的界定？

A - Were the criteria used to select articles for inclusion appropriate?	
What is best?	Where do I find the information?
The inclusion or exclusion of studies in a systematic review should be clearly defined a priori. The eligibility criteria used should specify the patients, interventions or exposures and outcomes of interest. In many cases the type of study design will also be a key component of the eligibility criteria.	The ***Methods*** section should describe in detail the inclusion and exclusion criteria. Normally, this will include the study design.
This paper: Yes ☐ No ☐ Unclear ☐ Comment:	

3-1. 研究收錄標準是否有明確的界定？

- 收錄文章條件(克服從前研究限制)

The contradictory results of these individual SRs make it difficult to draw conclusions on the potential effectiveness of acupuncture and related therapies. An overview of the existing SRs is needed to provide an update on all synthesised clinical evidence on acupuncture and related therapies for palliative cancer care[10]. Although such an overview[11] has already been conducted, its trustworthiness is limited for the following reasons: first, the search dates were limited to 2000 to 2011; hence, SRs published outside this time frame, including those published or updated since[8,9,12–14], were not included. Second, the search strategy of the previous overview did not include Chinese-language databases, which may have led to the omission of clinical evidence[15]. Third, the methodological quality of the included SRs was not appraised with a validated instrument[16], which limits the interpretation of their overall trustworthiness.

To overcome these limitations, we conducted an up-to-date overview of SRs to evaluate the methodological quality of SRs and meta-analyses of acupuncture for management of symptoms for palliative care of cancer and to describe the clinical evidence reported in these SRs and meta-analyses.

Participants. To be eligible, the SRs had to include clinical trials that recruited patients with a diagnosis of any type of cancer who have received acupuncture and related therapies for supportive or palliative care.

收案病患條件：

1.經西醫診斷確診為癌症患者，任何癌症皆收錄.

2.接受針灸及其他相關治療作為supportive or palliative care.

3-2. 關於研究族群、涉入治療、比較分組及結果評估是否適切？

- **Study Groups**

  23SRs,248 primary studies and 17,392 patients.

Overall, these SRs reported the results from 248 primary studies (median, 7) and 17,392 patients (median, 548). Three SRs (13.0%) were published in Chinese, and the rest were written in English. Three (13.0%) were Cochrane SRs. Thirteen (56.5%) SRs included only RCTs, and the rest included multiple study designs, including both clinical trials and observational studies. Seventeen (73.9%) of the SRs covered various types of cancer. Three SRs focused on patients with breast cancer[6,7,17], and three other SRs summarised only evidence on patients with prostate cancer[18], head and neck cancer[19] and lung cancer[20].

- **Intervention**

Eleven SRs[6,7,14,18,20–26] included any type of acupuncture or related therapy either with or without needle insertion. Nine SRs[8,9,12,17,19,27–30] included only acupuncture with needle insertion and excluded other forms of related therapy, including TENS, laser acupuncture, acupressure and moxibustion. The remaining three SRs focused only on one particular form of acupuncture or related therapy, including TENS[13], moxibustion[31] and acupoint injection[32].

- **Outcomes**

Sixteen SRs summarised the evidence on a single outcome, including CRP[8,13,21,22,26,27], fatigue[9,24,31], hot flashes[17,18], chemotherapy-induced nausea and vomiting (CINV)[14,20], hiccups[29] and irradiation-induced xerostomia[19]. The remaining seven SRs[6,7,12,20,28,30,32] reported evidence on a wide range of outcomes in the palliative care of patients with cancer. The characteristics of these SRs can be found in Tables 1–3. Table 1

First author and year of publication	Included study design	Diagnosis	Search period	Nature of acupuncture and related interventions	Nature of control interventions	Outcomes	No. of studies (No. of patients) included	Meta-analysis conducted?
Lee, 2009b	Only RCT	Breast cancer	Aug. 2008	Acupuncture with needle insertion: needle acupuncture or electro-acupuncture. Related therapies including laser acupuncture and moxibustion were excluded.	No restriction on type of control. Controls included sham acupuncture, conventional care or relaxation.	Hot flushes.	6 (202)	Yes
Peng, 2010	Only RCT	Various	Jun. 2008	Needle acupuncture, electro-acupuncture, or auricular acupuncture.	No restriction on type of control. Controls included conventional care, sham acupuncture or no treatment.	Cancer related pain.	7 (634)	No
Pu, 2010	Only RCT	Various	Jun. 2009	Needle acupuncture or electro-acupuncture.	Conventional care.	Nausea, vomiting and treatment related gastrointestinal adverse reaction.	6 (461)	Yes
Choi, 2012a	Only RCT	Various	Apr. 2011	Needle acupuncture, auricular acupuncture, electro-acupuncture or "fire needle".	Sham acupuncture or conventional care.	Cancer related pain, operation related pain.	15 (1157)	Yes
Hurlow, 2012	Only RCT	Various	Oct. 2010	Single or dual channel TENS	Placebo or placebo plus conventional care.	Cancer related pain.	3 (88)	No
Paley, 2012	Only RCT	Various	Jun. 2012	Penetrating acupuncture: including needle acupuncture or auricular acupuncture.	Sham acupuncture or conventional care.	Cancer related pain.	3 (204)	No
Posadzki, 2013	Only RCT	Various	Nov. 2012	Needle acupuncture plus electro-acupuncture; or needle acupuncture plus education.	No restriction on type of control. Controls included sham acupuncture or conventional care.	Cancer-related fatigue	7 (548)	No
Zeng, 2013	Only RCT	Various	May 2013	Needle acupuncture. Trials using acupuncture without needle insertion was excluded.	Sham acupuncture, conventional care, self-acupressure, no treatment or waiting list.	Cancer-related fatigue, quality of life, functional well-being	7 (689)	Yes
Lian, 2014	Only RCT	Various	Jun. 2010	Needle acupuncture or electro-acupuncture	Chemotherapy, conventional care or sham acupuncture	Vomiting, abdominal discomfort, diarrhea, peripheral neuropathy; cancer pain, post-operative urinary retention, quality of life, vasomotor syndrome, recovery of gastrointestinal function	33 (2503)	No

研究族群

涉入治療

比較分組

結果評估

Table 1. Characteristics of included systematic reviews of RCT on needle acupuncture for cancer palliative care. Keys: RCT, randomized controlled trial; TENS, Transcutaneous electrical nerve stimulation.

First author and year of publication	Included study design	Diagnosis	Search period	Nature of acupuncture and related interventions	Nature of control interventions	Outcomes	No. of studies (No. of patients) included	Meta-analysis conducted?
Chen, 2013	Only RCT	Lung cancer	Jun. 2013	Needle acupuncture, acupoints injection, moxibustion, and applications of acupoint plaster or magnet.	No restriction on type of control. Controls included conventional care or CHM alone.	Various outcomes, including nausea and vomiting, tumor response, quality of life (measured by Karnofsky performance status & EORCT-QLQ-C30).	31 (1758)	Yes
Lee, 2014	Only RCT	Various	Apr. 2013	Moxibustion (direct, indirect, heat-sensitive, moxa burner, or natural moxibustion).	Conventional care.	Cancer-related fatigue	4 (374)	Yes
Cheon, 2014	Only RCT	Various	Mar. 2013	Acupoints injection with Chinese herbal extract solution; or with conventional medications.	Conventional care	Cancer related pain, chemotherapy-induced nausea and vomiting, lleus, hiccup, fever, quality of life and gastrointestinal symptoms	22 (2459)	Yes
Ezzo, 2014	Only RCT	Various,	Not reported	Needle acupuncture; acupressure; electro-acupuncture or TENS.	No restriction on type of control. Controls included conventional care, sham acupuncture, or conventional care plus sham acupuncture.	Chemotherapy-induced nausea or vomiting, or both.	11 (1247)	Yes

研究族群

涉入治療

比較分組

結果評估

Table 2. Characteristics of included [illegible] of RCT on acupuncture and related therapies for cancer palliative care. Keys: CHM: Chinese herbal medicine; RCT, randomized controlled trial; TENS, Transcutaneous electrical nerve stimulation.

First author and year of publication	Included study design	Diagnosis	Search period	Nature of acupuncture and related interventions	Nature of control interventions	Outcomes	No. of studies (No. of patients) included	Meta analysis conducted?
Lee, 2005	Quasi-RCT	Various	Feb. 2004	Needle acupuncture, ear acupuncture or electro-acupuncture. Other related therapies including laser acupuncture, acupressure, moxibustion and TENS were not reviewed.	Conventional care or sham acupuncture.	Cancer related pain, operation related pain.	7 (368)	No
Lu, 2007	RCT or quasi-RCT	Various	2004	Needle acupuncture, electro-acupuncture with warming needle or acupuncture point injection with saline.	Chemotherapy alone or chemotherapy with vitamins or non-herbal supplements	Leukocytes level.	11 (960)	Yes
Lee, 2009a	RCT, quasi-RCT, or observational studies	Prostate cancer	Dec. 2008	Needle acupuncture, electro-acupuncture or auricular acupuncture.	Conventional care.	Hot flushes.	6 (132)	No
Chao, 2009	RCT, quasi-RCT, or case series study	Breast cancer	Oct. 2008	Needle acupuncture, electro-acupuncture, acupoints injection, self-acupressure or acupoints stimulation by devices.	No restriction on type of control. Controls included placebo, convention care or no treatmen	Cancer therapy-related adverse events: hot flashes, nausea and vomiting, lymphedema, leukopenia.	26 (1548)	No
Dos Santos, 2010	RCT and case series	Breast cancer	Apr. 2009	Needle acupuncture, electro-acupuncture, acupuncture plus acupressure or auricular acupuncture.	No restriction on type of control. Controls included sham acupuncture, conventional care, waiting list or no treatment.	Cancer therapy-related adverse events: hot flashes, fatigue, pain, dyspnea, psychological well-being, lymphedema and vomiting.	12 (612)	No
O'Sullivan, 2011	RCTs and SR of RCTs	Head and neck cancer	2010	Needle acupuncture or electro-acupuncture. 'Non-needling' techniques including laser acupuncture, acupressure or acupuncture-like TENS were not considered.	Sham acupuncture conventional care.	Irradiation-induced xerostomia	3 (123)	No
Choi, 2012b	RCT and quasi-RCT	Various	Jul. 2011	Needle acupuncture or electro-acupuncture. Other related therapies, including laser acupuncture, acupressure, auricular acupuncture using pressure device, acupoints injection and moxibustion were not considered.	Conventional care.	Cancer related hiccups.	5 (296)	
Finneg-an-John, 2013	RCT and quasi-RCT	Various	Jun. 2012	Needle acupuncture or acupressure.	Sham acupuncture.	Cancer-related fatigue	1 (35)	No
Zheng, 2014	RCT and quasi-RCT	Various	2013	Needle acupuncture alone or needle acupuncture plus conventional care.	Conventional care alone.	Cancer related pain	5 (395)	Yes
Frisk, 2014	RCT and case series	Various	Oct. 2012	Needle acupuncture, electro-acupuncture or auricular acupuncture.	No restriction on type of control. Controls included conventional care.	Hot flushes.	17 (599	No

研究族群

涉入治療

比較分組

結果評估

☑ Yes

☐ No

Table 3. Characteristics of included systematic reviews of various study design on acupuncture and related therapies for cancer palliative care. Keys: RCT, randomized controlled trial; SR, systematic review; TENS, Transcutaneous electrical nerve stimulation.

4.所收錄的研究是否為有效力(valid)的研究？

A - Were the included studies sufficiently valid for the type of question asked?	
What is best?	Where do I find the information?
The article should describe how the quality of each study was assessed using predetermined quality criteria appropriate to the type of clinical question (e.g., randomization, blinding and completeness of follow-up)	The ***Methods*** section should describe the assessment of quality and the criteria used. The ***Results*** section should provide information on the quality of the individual studies.
This paper: Yes ☐ No ☐ Unclear ☐ Comment:	

The methodological quality of the SRs included in this overview was satisfactory. Good performance in the following areas was noted: conducting duplicate study selection and data extraction, implementing comprehensive literature search, assessing the scientific quality of included studies and appropriately incorporating scientific quality in the formulation of conclusions. At the same time, improvements should be made in the following areas.

First author and publication year	AMSTAR item										
	1	2	3	4	5	6	7	8	9	10	11
Lee, 2005	N	Y	Y	N	Y	N	Y	N	NA	N	N
Lu, 2007	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Lee, 2009a	N	Y	Y	Y	N	Y	Y	Y	NA	N	N
Lee, 2009b	N	Y	Y	Y	N	Y	Y	Y	Y	N	N
Chao, 2009	N	Y	Y	N	N	Y	Y	Y	NA	N	N
Peng, 2010	N	Y	Y	Y	N	N	Y	Y	NA	N	N
Dos Santos, 2010	N	Y	Y	NR	N	Y	Y	Y	NA	N	N
Pu, 2010	N	Y	Y	NR	N	N	Y	Y	Y	N	N
O'Sullivan, 2010	Y	NR	Y	Y	Y	Y	Y	Y	NA	N	N
Choi, 2012a	N	Y	Y	Y	N	Y	Y	Y	Y	N	N
Hurlow, 2012	Y	NR	Y	NR	Y	Y	Y	Y	NA	N	N
Paley, 2012	Y	NR	Y	Y	Y	Y	Y	Y	NA	N	N
Choi, 2012b	N	Y	Y	Y	N	Y	Y	Y	Y	N	N
Posadzki, 2013	N	Y	Y	Y	N	N	Y	Y	NA	N	N
Zeng, 2013	N	Y	Y	N	N	N	Y	Y	Y	N	N
Finnegan-John, 2013	N	Y	Y	N	N	Y	Y	Y	NA	N	N
Chen, 2013	N	Y	Y	Y	N	N	Y	N	N	N	N
Zheng, 2014	N	Y	Y	NR	N	N	Y	Y	Y	N	N
Lee, 2014	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N
Frisk, 2014	N	NR	Y	N	N	N	N	N	NA	N	N
Cheon, 2014	N	N	Y	Y	N	N	Y	Y	Y		N
Ezzo, 2014	Y	Y	Y	Y	Y	N	Y	N			N
Lian, 2014	N	Y	Y	N	N	N	Y	N		N	
# of Yes (%)	5 (21.7)	18 (78.3)	23 (100.0)	13 (56.5)	6 (26.1)	12 (52.2)	22 (95.6)	18 (78.3)	9 (	0 (0.0)	

Table 4. Methodological quality of included systematic reviews on acupuncture and related treatment for cancer palliative care.

Keys: N, no; NA, not applicable; NR, not reported; Y, yes (SR fulfilling the criteria); # of Yes, number of yes.

5. 如果有meta-analysis，所收錄的研究是否有足夠的一致性以產生合併的資料？

▪T - Were the results similar from study to study?	
What is best?	Where do I find the information?
Ideally, the results of the different studies should be similar or homogeneous. If heterogeneity exists the authors may estimate whether the differences are significant (chi-square test). Possible reasons for the heterogeneity should be explored.	The ***Results*** section should state whether the results are heterogeneous and discuss possible reasons. The forest plot should show the results of the chi-square test for heterogeneity and if discuss reasons for heterogeneity, if present.
This paper: Yes □ No □ Unclear □	

$I^2 = 0$ = perfect homogenous
$I^2 = 0 \sim 25\%$ = low heterogeneity
$I^2 = 25\% \sim 50\%$ = moderate heterogeneity
$I^2 > 50\%$ = high heterogeneity

|Z|	P	
≧2.58	**≦0.01**	**非常顯著**
≧1.96	≦0.05	顯著
<1.96	>0.05	不顯著

First author and publication year	Outcome assessment method	Main results	Notes on interpretation
Cancer related pain			
Peng, 2010	Total response rate or VAS	One RCT with low RoB reported that auricular acupuncture provides statistically significant relief on CRP when compared to sham acupuncture on Day 30 ($p = 0.02$) and Day 60 ($p < 0.001$).	This SR included the same low RoB RCT as Lee 2005 did. All the other six studies suggested positive effect of acupuncture in reducing CRP, although they are judged to have high RoB according to the Jadad scale. Five out of the six studies used total response rate as the primary outcome, which was not a validated outcome.
Choi, 2012a	Validated scales or VAS	Acupuncture showed positive add-on effect on response rate when compared to conventional care alone. No significant differences were found in the comparisons of acupuncture versus conventional care on response rate, or acupuncture versus sham acupuncture on pain score.	Considerable heterogeneity ($I^2 >= 67\%$) was observed in all three meta-analyses. One study was the same low RoB trial identified by Lee, 2005. All the other trials had poor reporting quality, and were judged as having unclear RoB.
Hurlow, 2012	Validated scales	When comparing TENS with placebo, the results suggested that TENS may improve bone pain during movement. No superior effect in other pain outcomes when comparing TENS with placebo or sham TENS.	All the three trials had small sample sizes ($n = 15$, 24 and 49). All of them had either unclear RoB for allocation concealment or blinding of outcome assessment.
Paley, 2012	Validated scales	One RCT with low RoB found that auricular acupuncture provided statistically significant relief on CRP when compared to sham acupuncture on Day 30 ($p = 0.02$) and Day 60 ($p < 0.001$).	Evidence from the only well designed RCT indicated effective ness of auricular acupuncture in relieving CRP. The other two studies were non-blinded and had incomplete outcome data.
Lian, 2014	VAS or efficacy rate	Results from all six studies suggested that acupuncture is effective in reducing CRP.	RoB of the six studies were assessed with Jadad scale in this SR, of which all scored 2-3 out of a total of 5. However, rationale for supporting these ratings was not given.
Cancer related fatigue			
Posadzki, 2013	Validated scales for measuring fatigue	In the two trials with low RoB, one ($n = 29$) reported significant reduction in fatigue level at 2 weeks in the needle acupuncture group, as compared with the sham acupuncture group. Another study ($n = 23$) found no significant difference between the acupuncture and sham acupuncture groups.	Acupuncture may be useful for reducing CRF but both trials were underpowered due to small sample size.
Zeng, 2013	General CRF change score	All four sets of comparison favored acupuncture; however, only one comparison (acupuncture plus education versus conventional care) reached statistically significant difference on general CRF level.	All the comparisons had high heterogeneity (I^2 values ranged from 65% to 94%, under random effect model.). Three trials had low RoB while the other four trials was judged to have high RoB. One had incomplete outcome data the other three lacked of allocation concealment and blinding.

Table 5. Clinical evidence on the effectiveness of needle acupuncture on cancer palliative care related symptoms-evidence from SR of RCT.

First author and publication year	Outcome assessment method	Main results	Notes on interpretation
Hot Flashes			
Lee, 2009b	diary or logbooks	Results from meta-analysis suggested that acupuncture is effective in reducing hot flashes frequency during treatment when compared to sham acupuncture. However, such difference was not seen after the treatment.	These studies were judged to have low RoB using the Jadad scale, with scoring ranged from 4 to 5 out of 5. Allocation concealment procedures were properly implemented.
Nausea and vomiting			
Pu, 2010	Effective rate	Results from meta-analyses indicate that electro-acupuncture and conventional care had similar effect for reducing CINV.	Clinical evidence was from one single clinical trial with poor reporting quality. RoB of this trial was judged to be unclear.
Quality of Life			
Zeng, 2013	Change in general QoL scores	Acupuncture showed no favorable effect in improving QoL when compared to sham acupuncture at 10-week follow-up.	These three studies had low RoB. Considerable heterogeneity was found among the three studies ($I^2 = 92\%$, random effect model was used).
Quality of Life			
Lian, 2014	QoL assessment scales and various indexes	Both studies suggested that acupuncture plus conventional care can significantly improve quality of life in cancer patients compared to conventional care alone.	These two trials were judged to have 2 or 3 scores out of 5 in the Jadad scale. However, no rationale was provided on how these scorings were rated.
Other symptoms			
Choi, 2012b	Response rates on reducing hiccup	Results from meta-analysis suggested a favorable effect of acupuncture on response rate for patients' hiccup as compared to conventional care.	All the three studies had poor reporting quality on RoB related information, and were judged to have unclear RoB.

Table 5. Clinical evidence on the effectiveness of needle acupuncture on cancer palliative care related symptoms-evidence from SR of RCT.

First author and publication year	Outcome assessment method	Main results	Notes on interpretation
Cancer related pain			
Cheon, 2014	Response rate	Controversial results were reported among the eight studies. As compared to conventional care, seven studies suggested benefit of acupoint injection in alleviating CRP. While the other one failed to find any positive effect from acupoint injection.	All included trials had high RoB for blinding, and unclear RoB on allocation concealment. All the included trails used response rate as the primary outcome, which was not a validated instrument.
Cancer related fatigue			
Lee, 2014	Response rate	Compared to conventional care alone, combination of moxibustion and conventional care showed favorable effect on response rate for CRF.	All the four trials had poor reporting quality. They were judged as having unclear RoB for both allocation concealment and blinding of outcome assessment. Considerable heterogeneity ($I^2 = 74\%$) was found in this random effect meta-analysis.
Nausea and vomiting			
Chen, 2013	Effective rate in reducing of nausea and vomiting (Grade II-IV)	The occurrence of chemotherapy-induced nausea and vomiting at Grade II-IV was remarkably reduced in the acupuncture plus conventional care when compared to conventional care alone.	The SR authors did not provide details on RoB among the included studies.
Cheon, 2014	Response rate	Acupoints injection is suggested to be more effective than conventional care for CINV.	All the included trials had high RoB for blinding, and unclear RoB on allocation concealment.
Ezzo, 2014	Proportion of patients with vomiting/nausea and Mean nausea/nausea severity	Acupuncture is effective in reducing the proportion of patients experiencing acute vomiting, but not in reducing the mean number of delayed vomiting episode, and in reducing severity of acute or delayed nausea.	The authors mentioned that only trials with low RoB were included, but there are no detailed assessment results on RoB for each of the trials.
Quality of Life			
Chen, 2013	QLQ-C30 total score	Acupuncture can improve QoL for lung cancer patients as compared to conventional care.	The SR authors did not provide details on RoB assessment for these two studies.
Cheon, 2014	Responder rate (% in Karnofsky score)	Acupoints injection significantly improved QoL compared to conventional care (responder rate: 50% versus 25%, $p < 0.01$).	Evidence was reported from one single study ($n = 108$). Details on RoB of this study were not provided by the SR authors.
Other symptoms			
Cheon, 2014	Response rates on reducing hiccup	Both trials reported a higher responder rate in the acupoints injection group as compared to conventional care. Result from one study reached statistically significance while the other did not.	The two studies had unclear RoB for allocation concealment and high RoB for blinding.

Table 6. Clinical evidence on the effectiveness of acupuncture related therapies on cancer palliative care related symptoms-evidence from SR of RCT.

First author and publication year	Outcome assessment method	Main results	Notes on interpretation
Cancer related pain			
Lee, 2005	VAS or patients' verbal assessment	One RCT with low RoB found auricular acupuncture provides statistically significant relief on CRP when compared to sham acupuncture on Day 30 ($p = 0.02$) and Day 60 ($p < 0.001$).	Evidence from the only well designed RCT indicated the effective ness of auricular acupuncture on relieving CRP. The other studies were either non-blinded ($n = 2$) or designed as case series ($n = 4$).
Chao, 2009	VAS	Controversial results were reported among the three studies. Significant positive effect from acupuncture was found in studies using VAS and number of analgesia applied ($p < 0.05$) as measures for CRP, but such result was not seem on Sedation score ($p > 0.05$).	RoB of the three studies were assessed with Jadad scale in this SR. No details on each RoB domain were provided to facilitate judgment on the overall trustworthy of evidence.
Dos Santos, 2010	VAS, or validated scales	Evidence from both studies suggested that acupuncture is useful in reducing CRP.	One study was the same low RoB trial identified by Lee, 2005. The other study was judged to have high RoB for lack of allocation concealment and blinding.
Zheng, 2014	Symptoms improvement rate	Insufficient evidence to judge the effectiveness of wrist ankle acupuncture in treating cancer pain.	All the included studies were judged to have high RoB for allocation concealment and blinding. However, no rationale supporting the RoB assessment results were provided. Symptom improvement rate was used as the primary outcome, which was not a validated instrument.
Cancer related fatigue			
Dos Santos, 2010	MFI	Needle acupuncture group had significantly higher improvement (36%) when compared to either acupressure group (19%) or sham acupressure (0.6%) group.	This trial was judged to have low RoB by the SR authors.
Finnegan-John, 2013	MFI	This SR identified the same trial as Dos Santos, 2010.	See interpretation on results from Dos Santos 2010.
Hot Flashes			
Lee, 2009a	Validated scales or patient diary	One trial with low RoB found both needle acupuncture and needle acupuncture + electro-acupuncture were effective for treating hot flush in prostate cancer patients when compared with baseline. No between group difference was found.	The only low RoB RCT compared needle acupuncture with electro-acupuncture; no other comparison was reported by the SR authors. The other five trials was judged to have high RoB with the Jadad scale, but no rationale were given on how the scoring was given.
Chao, 2009	Self-administrated questionnaires	One trial with low RoB reported significant positive effect of acupuncture in reducing hot flushes when compared with sham acupuncture. However, other low RoB trial did not find any difference between the two groups.	The other five trials were judged as having high RoB using the Jadad scale; of which two of them were case series studies.
Dos Santos, 2010	Daily diary/log records No. of hot flashes	Two trials with low RoB found that acupuncture was more effective in reducing hot flushes when compared to sham acupuncture, although the results from one of them did not reach statistical significance.	Current evidence from two trials with low RoB suggests that acupuncture may be useful in reducing hot flashes in breast cancer patients. However, two of the other three trials had high RoB. One did not implement no allocation concealment or blinding; and the other one was only a case series study.
Frisk, 2014	Not reported	Results indicated that acupuncture treatment can reduce hot flashes in women with breast cancer and men with prostate cancer over a 3 months period. Nevertheless, it is not reported that how the outcome was measured.	The SR authors reported all the seven trial scored ≥ 3 score out of 5 in the Jadad scale, however, no rationale on the scorings were given.

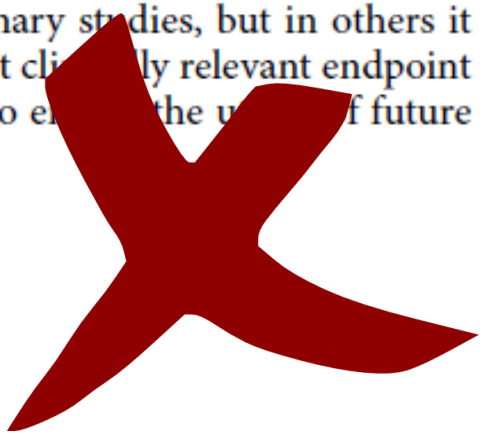
Table 7. Clinical evidence on the effectiveness of acupuncture and related therapies on cancer palliative care related symptoms-evidence from SR on various types of study design.

First author and publication year	Outcome assessment method	Main results	Notes on interpretation
Nausea and vomiting			
Chao, 2009	Validated scale	One trial with low RoB reported positive effect of electro-acupuncture in treating CINV when compared with sham acupuncture or conventional care. The effect persisted for five days, and it was not sustained from ninth days onward.	The remaining 10 trials were judged to have high RoB by the Jadad scale, of which two of them were case series studies. However, no rationale on the scorings was given.
Nausea and vomiting			
Dos Santos, 2010	Total no. of vomiting episodes and no. of vomiting free days	Patients in electro-acupuncture group had significantly greater proportion of nausea-and-vomiting-free days than patients in the other two groups during a 5-day treatment period; this benefit did not persist onward to the ninth days follow up. This SR identified the same low RoB trial as in Chao, 2009 above.	This evidence was from one clinical trial with low RoB for allocation concealment and blinding of outcome assessment. However, RoB for blinding of participants and personnel were high.
Other symptoms			
Lu, 2007	Leucopenia (change in WBC count	Results from meta-analysis suggested that acupuncture plus conventional care was an effective option for chemotherapy-induced leukopenia as compared to conventional care alone.	All the included studies were judged to be of high RoB under the Jadad scale. However, no rationale was provided on how these scorings were rated.
Chao, 2009	RILP	The authors reported that WBC level were increased but no further details were provided.	The result is reported from a small case series study.
Chao, 2009 & Dos Santos, 2010	BCRL	In both SRs, acupuncture was found to be effective in treating BCRL. It is mentioned that the participants' body circulation was enhanced, and sense of heaviness was reduced. Patients have also reported significant improvement on the range of movements, including shoulder flexion and abduction of the affected limbs.	The result is reported from a small case series study
Choi, 2012b	Response rates on reducing hiccup	Results from meta-analysis suggested a favorable effect of acupuncture on response rate for patients' hiccup as compared to conventional care.	All the three studies had poor reporting quality on RoB related information, and were judged to have unclear RoB.
O'Sullivan, 2011	Improvement on Xerostomia as measured by SFR	All three trials reported significant improvement on SFR when compared to baseline ($p < 0.05$), but no significant differences were seen between acupuncture and sham acupuncture group.	All the three studies used objective outcome measurements to reduce detection bias. One trial has low RoB for allocation concealment while the other two have unclear RoB.
Other symptoms			
Dos Santos, 2010	Rating scale on dyspnea.	In both groups, significantly improvement on dyspnea scores were observed immediately after treatment ($p = 0.003$). Dyspnea scores were slightly higher in acupuncture group than sham group, however, no significant differences were seen.	The trial was judged to have low RoB, but there is a lacking of blinding of personnel.

Table 7. Clinical evidence on the effectiveness of acupuncture and related therapies on cancer palliative care related symptoms-evidence from SR on various types of study design.

5. 如果有meta-analysis，所收錄的研究是否有足夠的一致性以產生合併的資料？

challenging because it includes a wide variety of techniques[38]. Different researchers may use different techniques, and in other cases the treatment protocol can be individualised according to Chinese medicine diagnostic principles. Such variation is reflected in the included SRs–many adopted a less-restrictive approach and embraced various techniques[6–9,14,18,20–23,25], whereas others focused only on a single technique such as moxibustion[31] and TENS[13]. As a result, the meta-analyses often pooled trials with highly heterogeneous acupuncture and control interventions[14,23], which makes interpretation of their results very difficult. Network meta-analysis[39] could be a solution that takes into account the heterogeneity amongst treatments in both groups. Unfortunately, the exact intervention protocols used in trials are often not reported[31], which prevented us from performing such an analysis. Finally, the interpretability of the reported results is also limited because of the wide variations in the choice of outcome measures. For example, pain was measured with a visual analogue scale in some primary studies, but in others it was reported as a binary response rate[22]. Future trials should choose the most clinically relevant endpoint as the primary outcome[40] and measure it using a validated method[11] so as to enhance the usefulness of future clinical evidence[41].



SCIENTIFIC REPORTS

OPEN

Effectiveness of acupuncture and related therapies for palliative care of cancer: overview of systematic reviews

Received: 18 March 2015
Accepted: 16 October 2015
Published: 26 November 2015

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- Conclusion：

1. 針灸及其他相關療法相較於一般西醫療法，對於癌因性疲倦、癌因性噁心嘔吐、白血球低下顯示有良好的療效。但因收錄的RCT的證據力較差，未來還需要更多研究去證實。
2. 針灸及其他相關療法對於癌因性疼痛、潮熱、打嗝及改善生活品質上，各SR之結論互相矛盾。
3. 針灸及其他相關療法對於口乾、呼吸困難、淋巴水腫及精神層面問題，目前現有證據不足以支持亦不足以反駁其有效性。
4. 目前研究顯示針灸及其他相關療法對於接受支持性療法的癌症患者並無嚴重的副作用。

評讀結論

統合分析文獻可信度評估表格	評讀
1. 此篇系統回顧是否提出明確定義的問題	Yes
2. 是否此篇回顧的搜尋策略可能有遺漏可能合適的臨床試驗？	Yes (遺漏CKNI)
3-1. 研究收錄標準是否有明確的界定？	Yes
3-2. 關於研究族群、涉入治療、比較分組及結果評估是否適切？	Yes
4. 所收錄的研究是否是有效力的研究（例如設計良好的亂數分組對照試驗）？	Yes
5. 如果有meta-analysis，是否所收錄的研究是否有足夠的一致性以產生合併的資料？	No(一致性不足，但有解釋可能原因)

得分：70/100

Step 4:Apply

- 3E：evidence, experience, expectation

我們的病人是否與研究中差異很大	同樣是癌症患者
此治療目前是否可行?	可行，有中醫部的醫院及中醫診所都可執行此醫療行為
我們的病人是否可以從該項治療中獲益？	患者可在接受針灸及其他相關療法後使癌症相關症狀及生活品質獲得改善
還有哪些替代方案？	conventional treatment, behavioural therapy, Chinese herbal medicine treatment
研究結果適用於您的病人嗎？	不一定
我們的病人如何看待此治療的結果	可參考

Step 5:Audit

- 肝癌末期患者的家屬詢問：「中醫各種療法如中藥、針灸、推拿或是其他輔助替代療法是否能幫助減輕患者的不適?使生活品質提升。」
- 醫師：「根據研究，針灸治療及其他相關療法對於改善癌因性疲倦、噁心嘔吐都有幫助，對於疼痛有些研究表示有效但有些顯示差異性不大，因此若是住在醫院可用會診中醫的方式或是至中醫診所接受針灸治療，並可請醫師教導一些穴位按壓，這些都能幫助改善身體上的不適。」


生命的圓滿不在乎長短，即使
必須結束，也可以擁有生命的
美好、安詳與無憾。
Thanks for your attention!!