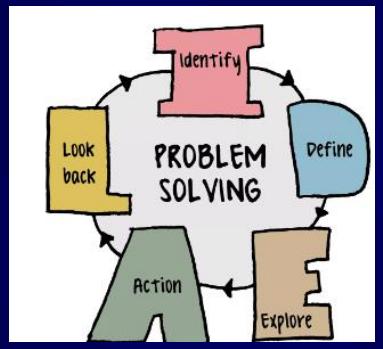
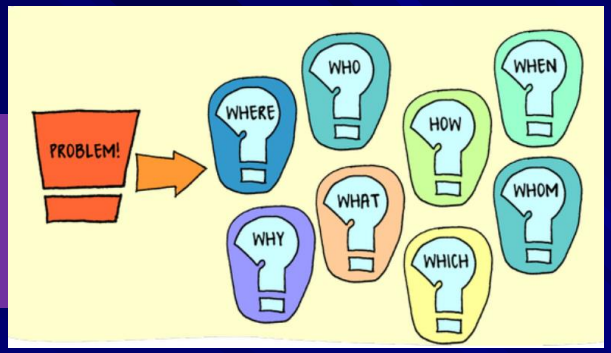
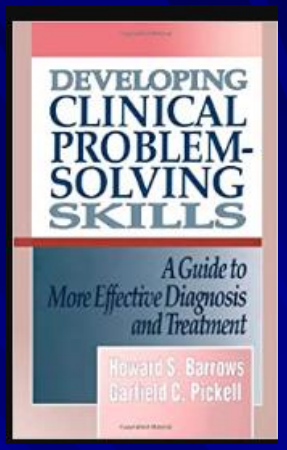


Problems
vs
Diagnosis



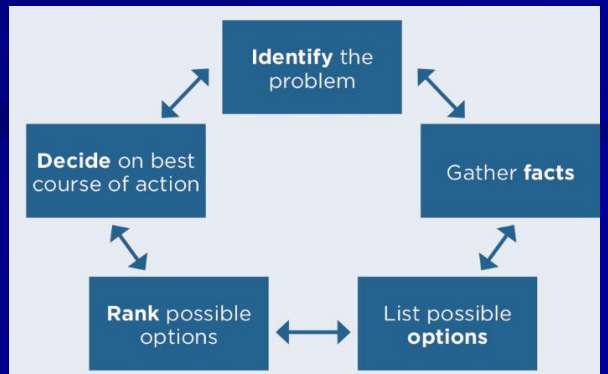


病歷記錄II
POMR
Problem solving and analysis

Cheng-Yi WANG

2024.04.19.

Problem list
RRSOAP



生病就要醫療,醫療一定有記錄
II.病歷記錄之重點

- Problem list
- Problem analysis and solving → **RRSOAP**
- 如何面對難以抉擇的問題.
- 1.放棄急救, 2放棄生命 3.手術或不手術
- 4. 化療或不化療, 5 要不要積極治療或消極
- 對Uncertainty不確定性, 醫師應如何說明
- 疾病原因Roots好思考並確定原因
- 危險因素量測(Risk measures)—可能會加重疾病影響恢復
- Risk factors prediction—醫學教育的重點 (III)

想像, 思考比知識重要
細膩觀察.發現問題,判斷結果

Quotes

"Imagination is more important than knowledge"

-Albert Einstein

"Originality is simply a fresh pair of eyes."

- Woodrow Wilson

原創來自你一對鮮明的眼睛

1856-1924

Woodrow Wilson

，美國第28任總統,
威爾遜所秉持的國際主義，也被後人稱為「威爾遜主義」，主張美國登上世界舞台來為民主而戰鬥，支持眾小民族（如波蘭）建立民族國家。這成為以後美國外交政策中一個頗有爭議的理念，為理想主義者所效仿，卻為現實主義者所排斥。

Covid 19時代:
老師:實体上課變線上-技巧?

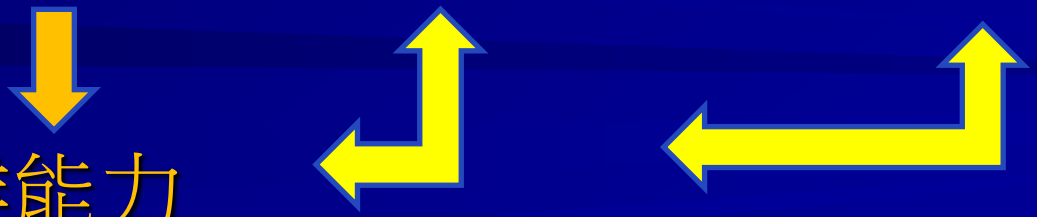
- 學生不在眼前、如何互動?
- 沒有專用的線上教室,看不到學生的反應.
- 學生是否認真?
- 教學材料,線上要準備充分之PPT傳給學生
- 緊湊,是否作好清楚的說明?講義未在學生側參考
- 老師的講話之速度音調,口音.是學生能否瞭解的關鍵.
- 師生討論明 顯減少.

對教育之影響應該相當大

慢慢看出問題了

Clinical exposure-減少了→Experience 減少了 --Competency專業能力也會減少

- 看病。診療Health care是最現實
- 病人的問題(症狀)病人敘述、醫師聆聽
- 千頭萬緒如何是好?
- 透過詢問,進一步知道詳情(interviewing)
- 思考為何發生這些問題Roots of the problems, Problem list,
- 有無特別影響之因素 Age, disease, nutrition. Medication, immunity—Risk factors.
- 檢查及檢驗: 思考原因,嚴重度.病情之變化及治療之反應
- Decision making→ make dx.→ then management



- 專業能力

CBME應如何補強,
Covid 19疫情可能降低醫師專業的能力

- 1.照樣實習,但提供最好的PPD/(N95+臉罩+防護衣+手套,)充分的知識(注意事項)+教師人盯人注意,隨時提醒(幾乎不可能)
- 2.加強Case conference--由著有豐富經驗的老師(通常是資深者)指導/會後有清楚的紀錄: 一五一十記載)
- 3.病房迴診中對新病人作比較明確之說明,對舊病人治療之反應也作明確的判定並說明理由, Round的紀錄是作為教學重要的內容、老師更要好好審訂.
- 4. Problem based teaching material作成數位教材並提示重點,並在小組教學中仔細
- 5. 利用教學群組Group lines提示自修課題(topics)及參考文獻.

混合式案例討論
(病人深入訪談十老師經驗傳承十案例討論)

- Medical student--深入訪談,瞭解問題
- **Clinical instructor-經驗傳承**
- **Visiting professor-綜合教學**
- 評論+完整討論

退休20年我主要的工作

1. Reality play實體病例之了解/報告
2. Clinical experience- real cases
3. 病房主治醫師迴診指導及討論 (教師分享經驗).
4. 案例**指導教授評論學生表現**,並作完整教學
   Integration and conclusion.

如何瞭解病人之問題?
如何解決病人的問題?

- 將是今後醫學教育的重心
- Problem based learning是必要的課程
- Symptomatology.(症狀機轉?如何判斷發生原因?以及相
- 關之危險因素)
- General aspect
- Subspeciality aspect.
- Orientation/case conferences/round.都要提示的重點
- 1.當學生提起診斷時,要問您為什麼下這個診斷、有何依據?
- 2. 當學生敘明病人有改善,一定詢問,何以得知
- 3.當學生說明病人可以出院時間他的根據?出院後要怎麼辦,
- (至少說明5min,)

醫師不可以製造病人的病情

- Covid 19, 改變了醫療方式及學生學習,
- 病人恐懼不敢上醫院看病→remote consultation
- 因為恐懼造成很多憂慮及焦急
- 醫學生被隔離,實際的實習案例數以及實習時數減少了
- 與病人接觸及會談的深度都受到影響
- 從病歷上可以看到:不是寥寥草草了解病情,就是**醫師製造病人的**病情.---這是何等嚴重的事實,一個不能忽視的問題—**必須及早改變**

Asking and thinking -knowledge,+ experience

- 發現問題– asking
- 相關性一靠連想
- 確認problem list
- 解決問題- thinking
- 分析
- 決策decision making
- 反應/結果-
- -

很親切的詢問.各項問題的詳細內容

再一一思考,一一,分析

從問題想到診斷是醫師最大的挑戰

Problems vs Diagnosis

問題是紅燈
要思考,分析-->黃燈
RR
S
O
A
P
要解決,解除,→綠燈
讓問題消逝或減輕

問題是什麼?
他會講出來,不知如何解釋有這狀況
他不知為何引起
他知道以前有過這樣的經驗(Past history)
或許他會知道如何解除?.
家人有同樣的經驗?—不一定知道
回憶過去或許慢慢會更清楚
一定要多問/可能可以問出個所以然.

Seven steps to problem solving

1. Define the problem. People often jump to the wrong conclusions. Work with your team and key stakeholders to define the ***specific problem***. Vague and loosely defined problems lead to poor solutions. Individuals often see the dilemma differently. Consequently, it's critical to reconcile differences into a unified problem statement.

2. Define the causes of the problem. Consider a personal problem – the family expenses have been over budget for the last three months. What is causing this problem? Eating out too much? Unexpected health care expenses? Using the credit cards too much? Try a cause and effect diagram to help you and your team discover the causal factors.

3Define the decision criteria. 確認診斷有依據This step is rarely considered. Before identifying solutions, work with the decision makers to determine how you will make the decision. For example, let's assume that you plan to purchase a software solution. The criterion could include: 1) cost, 2) ease of implementation, 3) the vendor's track record with other customers, and 4) how long the vendor has existed.

4.Identify solutions. Now we can identify solutions. Brainstorming is a great tool for identifying ideas.

5. Select a solution. Let's say we've identified five solutions. We now apply our criterion as a filter for determining the best solution. If you like, you could score each solution for each criterion using a scale such as 1 to 5. Finally, total the scores and determine the best solution with your team.

6.Implement the solution. The previous steps are strategic; we are attempting to define the strategy of how we will move from our current state to the desired future state. Now, we take action.

7.Evaluate the results. None of our previous efforts matter if we fail to obtain the desired results. Periodically verify your results. For example, you could measure the results three months after the implementation, six months, and one year later. If you are not getting the desired results, why? Do we need to tweak the solution or did we make a poor strategic decision?

1. Identify the problem(s).
→ then problem list

- 最難也是最重要的一部分
- **1. Listen**—through interviewing technique
- ask and clarify.→ problem(symptoms)
- thinking **: what are the roots (causes and**
- **what are the possible risk factors**.(R and R)
- get facts related to problem(s.O.) (Obj. findings)
- make Problem list
- 2. Correlation : knowledge and experience
- 3. **Possibility(A)** and **decision making-**→Plan.(P)

Problems 是臨床診療的核心
也是病人最關切的重點

問題是紅燈

要思考,分析-->黃燈

RR

S

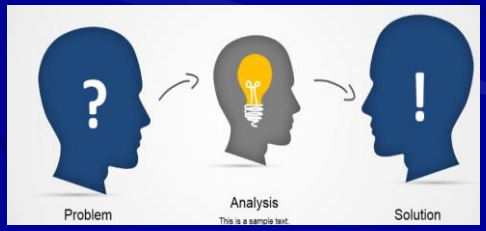
O

A

P

要解決,解除,→綠燈

讓問題消逝或減輕



好好分析,有正確的判斷=診斷.才能解決問題,治好病.

Problems 應如何分析處置,

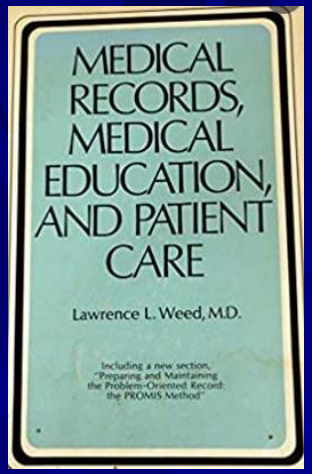
Problem-Oriented Medical Record (POMR)

- Lawrance L. Weed (1964)
- 以問題(problem)為中心之病歷書寫，住院時把所有之問題列出。
- 再針對每一問題，給予初步評估分析及提出治療計畫(包括診斷，治療，及衛教計畫).

- 每日之progress note 亦是針對每一問題給予評估分析及後續之處理計劃

Lawrence Weed

- **Lawrence Leonard Weed** (December 26, 1923 – June 3, 2017)
  - graduated from Hamilton College and, later, the Columbia University College of Physicians and Surgeons (1947)
  - *Weed, L. L. (1964-06-01). "Medical Records, Patient Care, and Medical Education". Irish Journal of Medical Science. **462** (6): 271–282. doi:10.1007/BF02945791. ISSN 1863-4362. PMID 14160426. S2CID 44816809.#*
  - *Weed, L. L. (1968-03-14). "Medical records that guide and teach". The New England Journal of Medicine. **278** (11): 593-600.*
  - *Weed, L. L. (1968-03-21). "Medical records that guide and teach". The New England Journal of Medicine. **278** (12): 652–657 .*

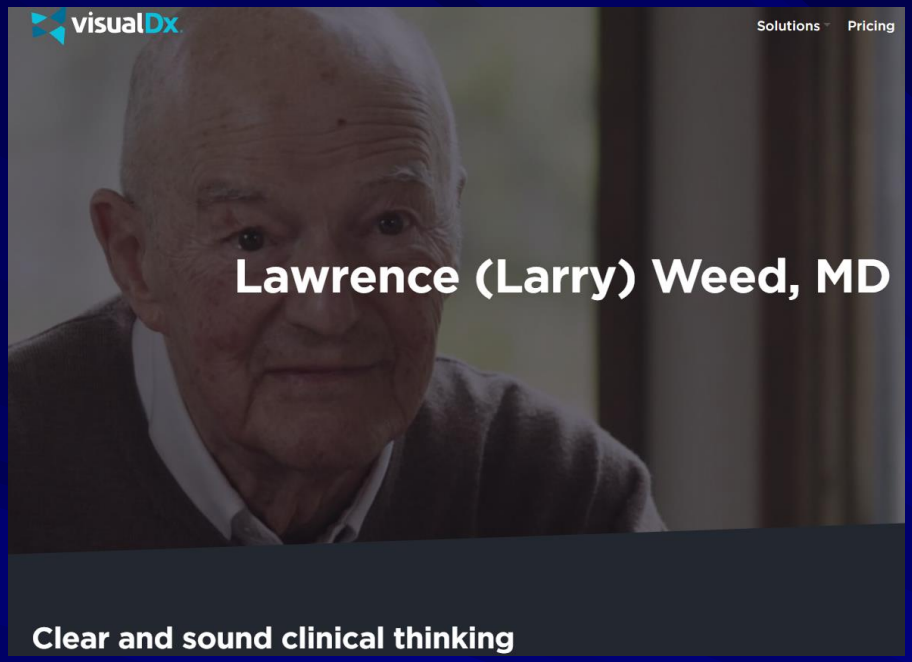


- **Book** Weed, Lawrence L. (1971). ***Medical Records, Medical Education, and Patient Care: The Problem-Oriented Medical Record as a Basic Tool.*** Cleveland, Ohio: Press of Case Western Reserve University.

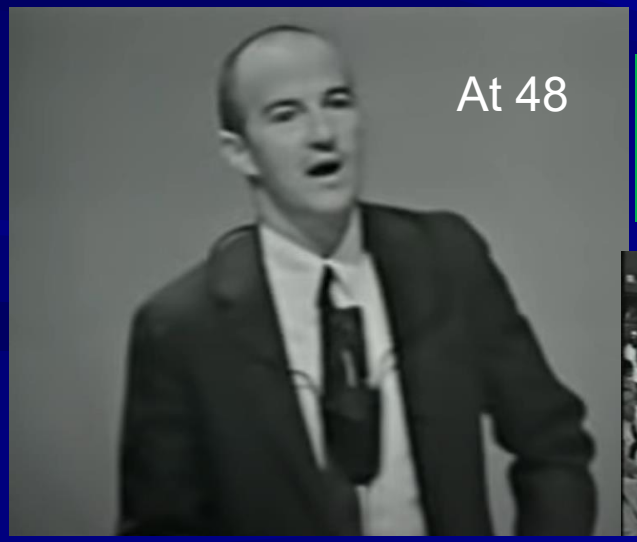
OUR PROMISE

At Hamilton, you are given the opportunity and support you'll need to study what you love, be who you are, and find your future.

042 – Why Healthcare is Flawed & How to Improve It:
The Work of Dr. Lawrence Weed
LESLIE KERNISAN, MD MPH



臨床思維要清晰完整



1971,
Internal Medicine Grand Rounds

Dr. Lawrence Weed, Pioneer in Recording Patient Data, Dies at 93

Dr. Lawrence L. Weed, who created a system for organizing patient information that is used all over the world, at a lecture in 1971. VisualDX

By William Grimes

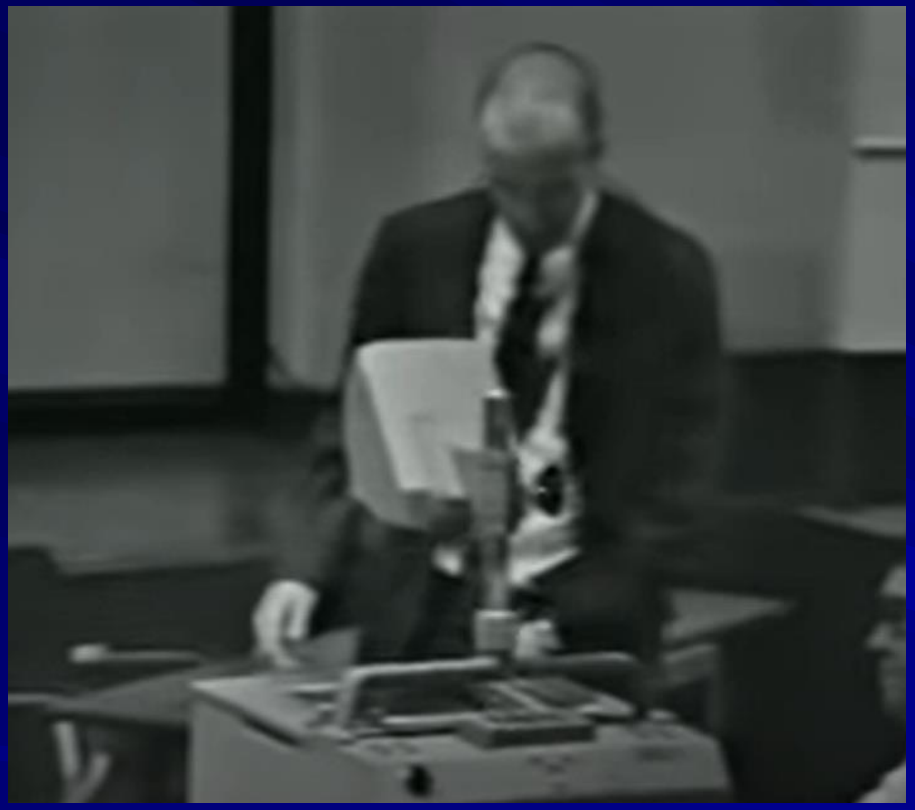
June 21, 2017

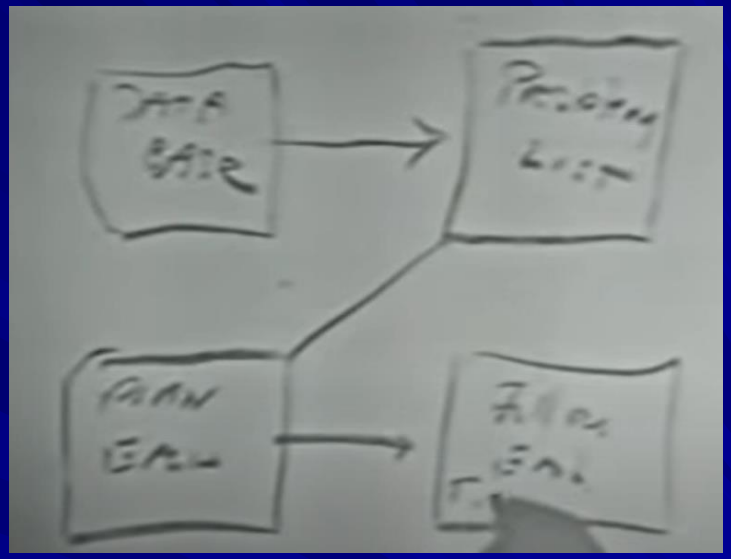
Dr. Lawrence L. Weed, who introduced a system for organizing patient data in the 1950s that is now used in hospitals all over the world, and who led the way in developing a computerized method for aiding in the diagnosis and treatment of diseases, died on June 3 at his home in Underhill, Vt. He was 93.

His son Lincoln confirmed the death.

New York Times on 2017.06.21

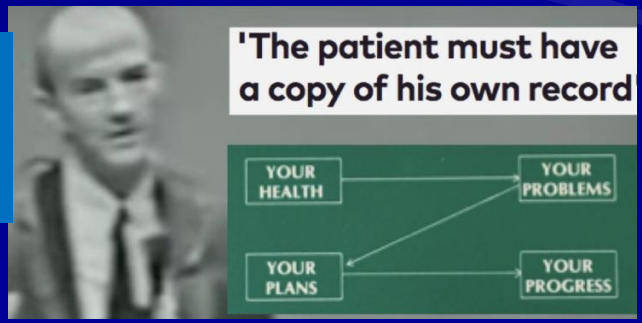
Lecture at Medicine Grand Rounds, 1971



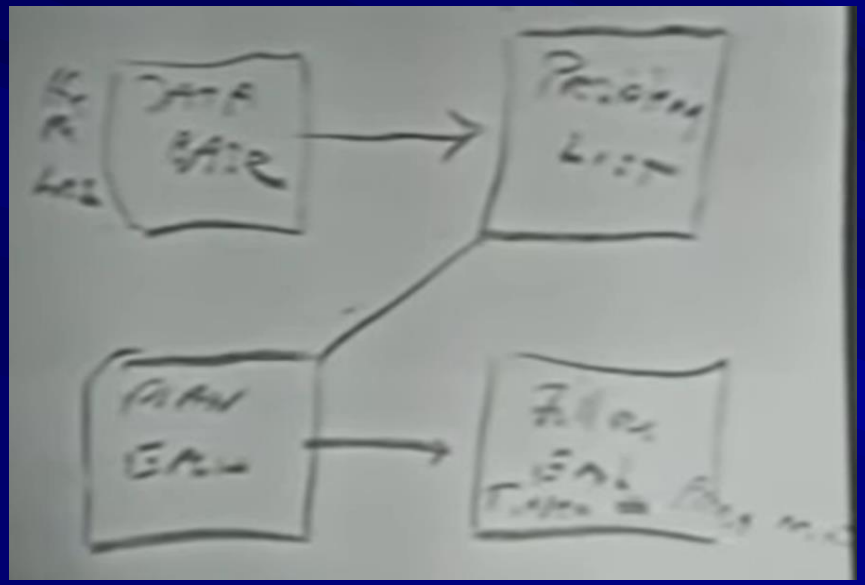


Larry Weed's 1971 Internal Medicine Grand Rounds - ...
https://www.youtube.com/watch?v=qMsPXSMTpFI

Microsoft PowerPoint is a presentation program,[6] created by Robert Gaskins and Dennis Austin[6] at a software company named Forethought, Inc.[6] It was released on April 20, 1987,(powerpoint 1.0 for Maccintosh)
Encyclopaedia Britannica. November 25, 2013. Archived from the original on October 8, 2015. Retrieved August 25, 2017.



Data base----------→ Problem list



Plan each---------→ Follow each
(Admission) (Progress note)

POMR 四個基本階段(Weed)

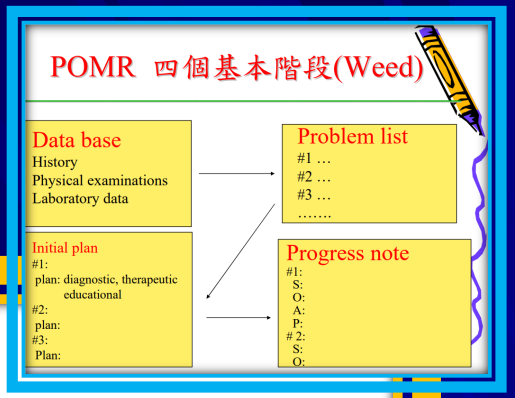
Data base
History
Physical examinations
Laboratory data

Problem list
#1 …
#2 …
#3 …
…….

Initial plan
#1:
plan: diagnostic, therapeutic
educational
#2:
plan:
#3:
Plan:

Progress note
#1:
S:
O:
A:
P:
2:
S:
O:

Lawrence Weed是對的



EDITORIAL FREE PREVIEW ARCHIVE

Ten Reasons Why Lawrence Weed Is Right

J. Willis Hurst, M.D.

THE innovations of Lawrence Weed concerning medical records are correct.[1] The purpose of this note is to encourage all physicians to hear what he is saying. Here are 10 reasons why we must.In the first place, he has devised a medical-record system that encourages the student, house officer and practicing physician to use sound logic in his thoughts about patients. In this sense his system is the essence of education itself.Secondly, the display system that he has created for medical data enables one to use the record as efficiently as one uses a dictionary.Thirdly, he has devised . . .

January 7, 1971
N Engl J Med 1971; 284:51-52
DOI: 10.1056/NEJM197101072840114

Related Articles

CORRESPONDENCE JUL 11, 1974
Problem-Oriented vs. Traditional Records

Right: 醫學教育的觀點 Sound logic in his thoughts about the patients.

Right：病歷紀錄系統有效可用,像一部字典

computerized version of POMR that came to be known as Promis — the Problem-Oriented Medical Information System.

R----.

十個R我只挑最重要的兩個R

Roots and Risk,.

1991 Computers in Healthcare Health Care Pioneer for: Contributions to the development of the healthcare information systems industry.
1984 ACMI (American College of Medical Informatics) Founding Fellow.

JAMIA Open, 6(1), 2023, ooad005
https://doi.org/10.1093/jamiaopen/ooad005
Research and Applications

2023.

Research and Applications

Problem-oriented documentation: design and widespread adoption of a novel toolkit in a commercial electronic health record

Richard L. Altman, Chen-Tan Lin, and Mark Earnest

Division of General Internal Medicine, Department of Medicine, University of Colorado Anschutz Medical Campus, Aurora, CO, USA

Results: We developed a problem-oriented documentation interface with a 3-column view showing (1) a list of visit diagnoses, (2) the current overview and assessment and plan for a selected diagnosis, and (3) a list of medications, labs, data, and orders relevant to that diagnosis. We also created a series of macros to bring information collected through the interface into clinicians' notes. This toolkit was put into a live environment in February 2019.

（1）就診診斷清單，（2）當前概述和評估以及所選診斷的計劃，（3）與該診斷相關的藥物、實驗室、數據和訂單清單

Problem list

RRSOAP

Problem oriented clinical information

醫療的主體:POMR-problem list

- 應用在admission Note.敘述全部的各個問題包括active跟inactive.
- Active problems都需要詳細的說明
- RRSOAP

在**Progress Note** 也是以POMR的方式來呈現,每一個active program都需要敘述--現在狀況/檢驗檢查結果/判斷是否有改善/是否要改變現在的處置.

在判斷是否出院的敘述上,再次列出全部的問題以及主要問題是否已經處置妥當
active-→inactive.
需要敘述相關的證據. 依據評估指標assessment parameters做決定.

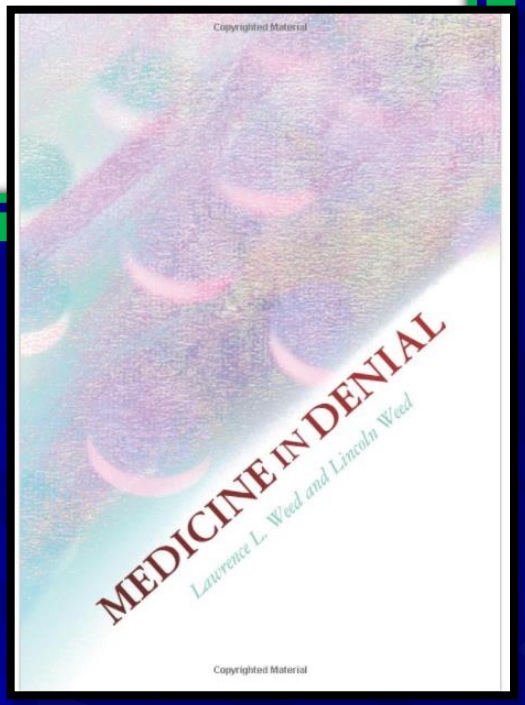
在出院摘要(Discharge summary)中也一樣的列出全部的問題以及處置每一個問題的變化. active or inactive .在後續的**門診追蹤**中也要對每一個問題好好敘述是否有任何的變化.

在居家醫療照顧Home health care要以POMR的觀念進行**追蹤**以及服務

MEDICINE IN DENIAL

Lawrence L. Weed and Lincoln Weed

Published Version 1.02, February 2013
Available for purchase at www.createspace.com/3508751

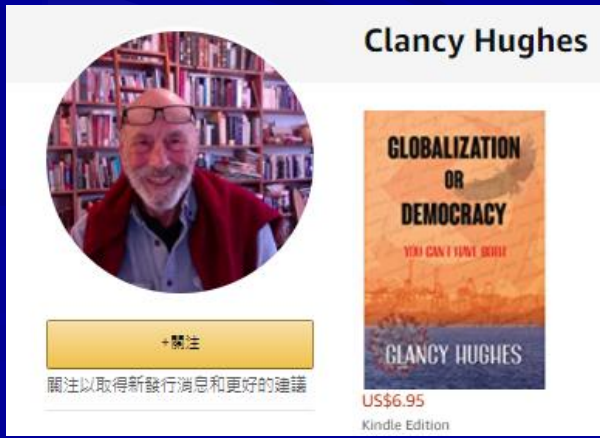


His last book, the polemical "Medicine in Denial" (2011), written with his son Lincoln,
outlined his plan for an overhaul of medical practice, with education aimed at fostering skills rather than knowledge.

模糊、否認,不肯承認

The book is a cry for healthcare reform,both educationally and clinically
Weed would have the standards, the records and decision making dependent on **an electronic repository of medical information** rather than having the electronic record reflect the judgment and intuition of the provider.
--Clancy Hughes, 2012.12.16

Weed父子完成的著作. 指出如果病人資訊不完全/不完整所做的判斷以及處置,包括檢驗檢查都是不必要的.也都是浪費.



醫療上之Uncertainty (不確定性)

-需要作選擇

Weeds' explanation of why patient involvement is essential in two common medical situations: cases of medical uncertainty, and cases of chronic

"In situations of uncertainty, the patient faces a set of choices, with substantial evidence for and against each choice based on the details specific to his or her own case. The physician cannot be relied upon to identify the individually relevant options and evidence without the right informational infrastructure. Once that infrastructure is available, reliance on the physician radically diminishes. The patient's private judgment should control, as trade-offs are recognized, ambiguities assessed, and choices made. The choices are inherently personal."

Trade-off : 無法兼顧兩個目標.保持平衡

***"[Chronic disease]** cases start with great uncertainty, but often what needs to be done becomes reasonably clear from careful investigation and planning. Then the issue is execution, feedback and adjustment…It is the patient, not the physician, who must live with the risks, the pain, the trade-offs, the effort and time that decisions may entail…The patient is the one who must summon the resolve to make the behavior changes that so often are involved in coping with chronic disease. If the patient does not feel responsible for deciding what has to be done and is not heavily involved in developing the informational basis of that decision, then very often the result is "noncompliance" with doctors' decisions."*

好好思考病人自主決定的陷阱

-多協助他(她)

- 如果經驗豐富的醫師都猶疑不決,難作決定,直接交給病人合理嗎?
- 醫師須**善盡職責好好說明**、最後仍要病人自行作決定,他要自己去面對、走下去。

面對一個困難的抉擇:生或死(生死兩難)應採取什麼樣的態度?

- 這是我們醫療人員必須要多加思考.
- 多說明多分析讓病人更加的理解.或許他才能夠作比較明智的決定.
- 而不是一句話: 你自己做決定

@@病歷上一定要清楚敘述醫療人員的意見,且明白告知病人--→最後病人的決定也要記載.

Problems在不同的地點說了出來, 處理的方式卻是相同.

- OPD---診所門診為主,
- Hospital-----醫院門診部.
- 急診: Emergency
- 住院: 病房
  Admission and
- hospitalization
- ICU
- OR
- Special treatment
- sites.
- Examination rooms

Problems:

Symptoms,

abdominal pain, fever….

Signs,

pallor, jaundice. coma

Accident

Fall→ pain
Cut-→Bleeding
Abrupt change -→

unconsciousness

診斷

1.詢問:
History taking
And review

2. PE.
Vital signs
consciousness.
Comprehensive check

3. Medical images.
X-ray. CT, MR, Endoscopy, US--

4.Lab. Exam.
LFT, CEA,AFP--

5. Special examinations.
ECG,EEG, ---

1. Problems:都是發生在病人身上之異常-history taking,一定要多問

所有的病史一定要有時間

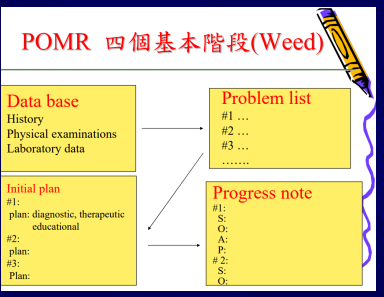
- 1.Present illness 發生之症狀、出現的徵象,檢查及檢驗上之異常構成major problems, active

---

- 2.Past history 已有之疾病目前尚未控制妥當, 甚至與本次疾病有關, active. Ex. Dm
- 3.Past history 已有之疾病目前已前控制妥當,仍需服葯 chronic , inactive , Ex. Hypertension
- 4.此次住院檢查及檢驗發現之問題, active or inactive. – hyperlipidemia, fatty liver(US), gall stone,(US)
- 5. -----過去之紀錄所呈現之問題,active or inactive

2. Problem list

- 1. 盡量 complete, including active and all inactive problems.
- 2.Symptoms + Time factor,
- Symptoms 為主, 一定要有 **Time**這個面向
- 3. **Active and severe on the top list. Then other active then inactive problems.**
- **4. Each problem** : Describe **RR-SOAP**
- **R-- roots=cause,--why?**
- **R-- risk, which potentiates symptoms,**
- S-symptoms
  O-objective findings
  A-assessment
  P-plan



POMR 的四個階段

2005.02開始到其他醫學中心教學→symptoms是怎麼發生的??

Problem list
#1 …
#2 …
#3 …
…….

- Data base-→Problem list
- S : Symptoms
- O : Objective findings
- A: Assessment– Dx, DD.
- evidence,
- severity
- P: Planning--→response—
- → Continue or Changing
- (DX. Rx.)

Admission
S
O
A
P

Progress note

Response

Continue or change

Healed ⟷ Died

Past history

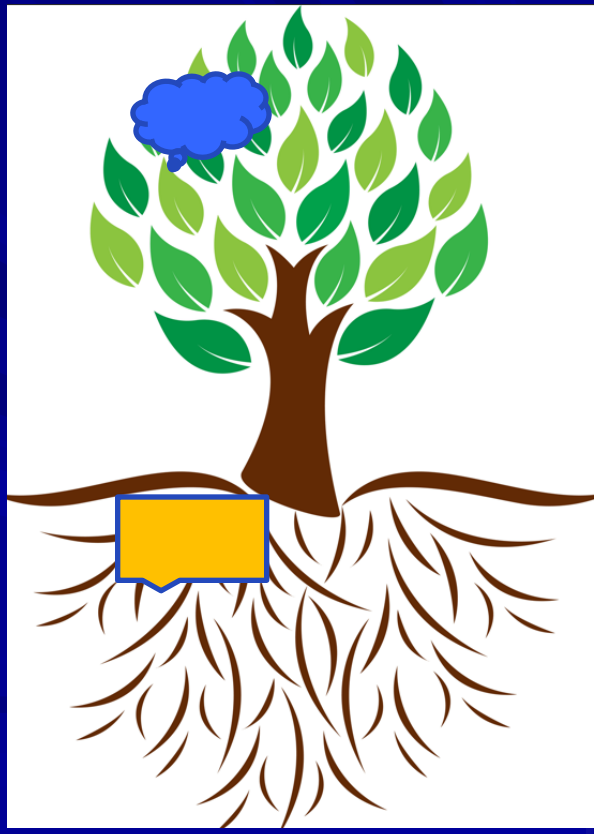
- 1.過去病史與現在的疾病常常有一些關聯性甚至於是舉足輕重.所以這個部分一定要特別注意目前是否還是active problem.
- 2.@@過去病史一定要註明時間
- 3.過去病史一定要敘述現在是不是還在治療(under treatment).目前的狀況是active or inactive
- 4.如果對過去病史不是很清楚的時候務必要查詢當初診斷及治療這個病的醫院病歷

3. Problem 發生的原因ROOTs

Where
When
Why
Who
How
What

R: rootst: 根源

- Roots :病因: 病是因何引起?
- 根很複雜、盤根錯雜.有暴露.有隱藏.
- 那一部分的問題?
- **Assessment.:** 評估
- 判定



Roots or causes of symptoms(disease)

- 1. Food born—related to diet/food
- 2. Trauma—accident
- 3. Contact with animal/patients
- 4. Stress, psychogenic
- 5. Aging-→ atherosclerosis
- 6. Air born diseases-contaminated? Hypoxic?
- 7. **Iatrogenic** (related to medication/procedures)
- 8. Others/Unknown

病因的判定靠智慧,
一部分是直覺, 另外
過去的經驗以及
既有的一些知識是判斷
疾病原因最重要的關鍵

注意過去的報告也很重要

Roots :病因1. 很明顯的原因

- Food poisoning—staphylococcus, aureus
- 典型的症狀在飲食後3-8 hours 發生
- 同時用餐的人好多人
- 一起發病(10-20 %)
- 食物中培養出細菌，
- (enterotoxin,)

73 CIBA
(Apresoline 50 MG)

@1985台北東門國小集體食物中毒
Apresoline 50 mg 誤當10 mg發給病人.

Images for 73 CIBA

Public Health Rep. Nov-Dec 1993;108(6):765-71.

Investigation of a staphylococcal food poisoning outbreak in a centralized school lunch program

M S Richards [1], M Rittman, T T Gilbert, S M Opal, B A DeBuono, R J Neill, P Gemski

Affiliations — collapse

Affiliation

1 Rhode Island Department of Health (RIDH), Division of Disease Prevention and Control, Providence 02908.

PMID: 8265762 PMCID: PMC1403460

Free PMC article

Abstract

The trend in many communities toward centralized school lunch preparation potentially increases the risk of foodborne illness. Foods often are prepared long before serving and may be distributed to satellite schools by persons with little formal training in safe techniques of food preparation or food service. In May 1990, an outbreak of staphylococcal food poisoning occurred in elementary schools in a Rhode Island community participating in such a program. In the investigation of the outbreak, students in schools that reported cases were interviewed. Food preparation, handling, and distributior were reviewed. At School E, 662 lunches were prepared and distributed to 4 additional schools (schools A-D). Schools A and B accounted for nearly all cases of the food poisoning, with rates of 47 percent and 18 percent. Eating ham increased the risk of illness (62 percent of those consuming ham and 3 percent of those who did not, relative risk = 18.0, 95 percent confidence interval = 4.0, 313.4). Large amounts of Staphylococcus aureus were cultured, and preformed enterotoxin A was identified in leftover ham. A food handler, who tested positive for the implicated enterotoxic strain S. aureus,

RESEARCH ARTICLE: OBSERVATIONAL STUDY

Surveillance of foodborne diseases in Taiwan

A retrospective study

Yu, Chia-Peng PhD[a,b]; Chou, Yu-Ching PhD[b]; Wu, Ding-Chung MS[a,b]; Cheng, Chun-Gu MD[c,d,e,*]; Cheng, Chun-An MD, PhD[f]

Editor(s): Arora., Gunjan

Author Information

Medicine: February 05, 2021 - Volume 100 - Issue 5 - p e24424
doi: 10.1097/MD.0000000000024424

食物中毒的根源尚未解决(消除)

Our study confirmed the high risk and increased incidence of foodborne diseases, food media classifications, bacterial classifications, and natural toxins in Taiwan. It is worthy of attention for the government health department-designed policy to promote disease prevention.

Table 1 - The places of foodborne disease acquisition from 2014 to 2018 in Taiwan.

Places	Total 26399	2014 (4426)	2015 (6166)	2016 (5171)	2017 (6181)
Home	1166	198 (4.5%)	192 (3.1%)	423 (8.2%)	199 (3.2%)
Restaurant	9157	1,245 (28.1%)	2,774 (45.0%)	1,638 (31.7%)	2,441 (39.5%
School	12180	1,994 (45.1%)	2,525 (41.0%)	2,499 (48.3%)	2,677 (43.3%
Office	1559	635 (14.3%)	191 (3.1%)	95 (1.8%)	191 (3.1%)
Hospital	234	36 (0.8%)	87 (1.4%)	50 (1.0%)	37 (0.6%)
Transportation vehicles	64	0 (0%)	34 (0.6%)	17 (0.3%)	6 (0.1%)
Military facilities	784	68 (1.5%)	36 (0.6%)	94 (1.8%)	390 (6.3%)
Outdoor	167	10 (0.2%)	8 (0.1%)	105 (2.0%)	17 (0.3%)
Vendors	409	74 (1.7%)	89 (1.4%)	155 (3.0%)	55 (0.9%)
Exterior	324	85 (1.9%)	129 (2.1%)	81 (1.6%)	25 (0.4%)
Prison	355	81 (1.8%)	101 (1.6%)	14 (0.3%)	143 (2.3%)

在學校,在餐廳, 在辦公室, 在我們每個人自己的家裡, 每年發生的案例還是很多.食安問題沒有受到應有的重視.就沒有解決

最近的事件更加動人心弦

- 寶林茶室食物中毒造成兩人死亡5人重傷—判定是?


聯合新聞網
寶林茶室 食物中毒再添1死
已釀2死 4人病危搶救中 新北瓶條供應商暫停販售
聯合報
寶林茶室食物中毒事件
累計12例個案
檢驗最快兩

3月28日，衛福部經進口商記錄發現彰化基督教醫院因其毒理實驗室需求而事前即已擁有米酵菌酸標準品存貨，與院方聯繫並獲其立即無償提供，調查進度得以大幅加快；其後報告新北地檢署與士林地檢署會同法官至新北市板橋殯儀館對往生者進行解剖鑑定，將檢體送交國立臺灣大學法醫學研究所以提前進行檢體分析，最終分析結果對米酵菌酸呈陽性反應。

寶林茶室案為2024年臺灣一宗嚴重食物中毒事件。3月下旬，臺北市信義區遠東百貨寶林茶室疑似販售食物處理不當導致滋生唐菖蒲伯克氏菌（學名：*Burkholderia gladioli*），並分泌米酵菌酸（英語：Bongkrek acid，醫學縮寫BKA），導致3月19日[5]起有多名食客食物中毒就醫。截至3月30日止，該案已造成2人中毒死亡、5人重症命危及18人輕症

食材變成消費者的食物有污染的機會

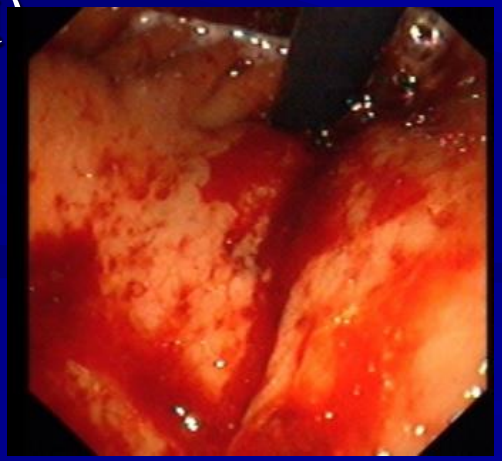
- 食材的來源—在產地收集
- →保存
- →運送到食物的製作地點(EX.如廚房)—
- 如何**保存,會不會污染?**
- 食物之製作,**加一些料**.賣出去了.部分保存在冰箱
  - 冰箱可靠嗎?(乾不乾淨)
- 再拿出來加熱製作-→放在餐具上,送到消費者的面前..吃下去了-----→跟著發病了

吃的安全,非常重要卻缺少查核評鑑

原因1, Mallory Weiss syndrome due to alcohol drinking

- 38歲產婦生完第一胎,一舉得男、婆婆親自下廚準備雞酒送至醫院,產婦喝雞酒嘔吐.
- 先黃湯再變紅-→Bloody.
- Emergency endoscopy revealed Mallory-Weiss tear in the esophagus.(45年前我用內視鏡解決了這個問題)

新出現的症狀
緊急內視鏡得到答案



Clinical Trial > Gastrointest Endosc. 2002 Jun;55(7):842-6. doi: 10.1067/mge.2002.124560.

Endoscopic hemoclip placement and epinephrine injection for Mallory-Weiss syndrome with active bleeding

Shih-Pei Huang [1], Hsiu-Po Wang, Yi-Chia Lee, Chun-Che Lin, Chang-Shiu Yang, Ming-Shiang Wu, Jaw-Town Lin

Affiliations – collapse

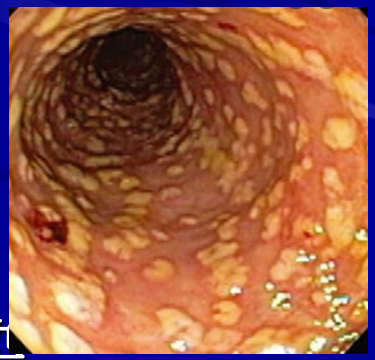
Affiliation

1 Department of Internal Medicine, College of Medicine, National Taiwan University Taipei, Taiwan

35 cases/primary hemostasis
In 35 cases with one recurrent bleeding

原因2：原因若隱若現

- 有因果關係,可以**思考找証據**,可以確定是病因
- Antibiotics---→pseudomembranous colitis
- Hip joint operations→ 4 antibiotics,---**diarrhea and bloody stool-**→endoscopy disclosed multiple yellowish plaques-→ pseudomembranous colitis.
- (C. difficile infection may be confirmed by
- toxin study and PCR).
- 現在的**Toxin study**已經可以快速證明細菌感染



CDI

- Diagnosis No single test is suitable as a stand-alone test confirming CDI CDI should first be considered when diarrhea symptoms are present (≥ 3 loose stools during 24 h). **The diagnosis of CDI is based on detection of C. difficile toxins directly in a stool sample, most commonly with an enzyme immunoassay (EIA), which provides rapid turnaround time (about 1–2h), as well as sensitivity of 75–85% and specificity of 95–100%.** Because of its low cost and ease of use, this is the most pop ular test in all laboratories. Tests detecting C. difficile antigens are based onthedetection of glutamate dehydrogenase (GDH) and are characterized by ease of use and rapid turnaround time as well as a specificity of almost 100%. However, they do not distinguish whether the strain is toxigenic (specificity of 59%) [18, 55]. It should be pointed out that old-generation assays (using latex agglutination) had sensitivity of 58–68% and specificity of 89–99%. In 2009, tests that use amplification of nucleic acid **(NAAT, nucleic acid amplification test**) were introduced.
- **NAAT have higher sensitivity (80 100%) and specificity (87–99%) compared to an EIA test. The specificity is especially high, reaching 95%**,

Jacek Czepiel et al : **Clostridium difficile infection: review**

Eur J Clin Microbiol Infect Dis. 2019 Jul;38(7):1211-1221.

doi: 10.1007/s10096-019-03539-6. Epub 2019 Apr 3. (L1505, L1506)

原因3,被視為怪病,原因不明

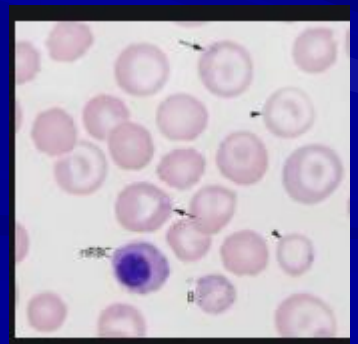
- 1. Methyl alcohol intoxication
- **(R2)桃園觀音鄉1967**, ER. Cases, 金魚式
- 的呼吸 /intern teaching.-→VF, defibrillator
- - → confirmed after toxicology.
- **2. FOU -→ 原來是renal TB,**
- (JC, 1962) before Grand Round
- Urinalysis- Numerous WBC/
- Gram stain and Loeffer stain—(-)
- Acid fast stain (+)
- Ref.1, 102 個可能。王正一(2009), (抉擇2005)
- Ref. 2, 小兵立大功 王正一, (抉擇2005)

好多專家好多教授共同討論
沒有結論可是很簡單的就解決了

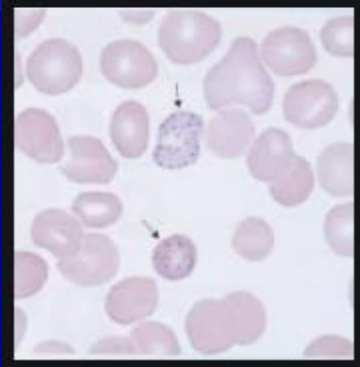
原因4,考慮他的職業,問題露出曙光,
Blood pictures-→特徵想到鉛中毒(TOCC)

- R1,1966, (4E病房) 15歲男abdominal pain + 昏昏沉沉→ ER—encephalitis ?
- 6E沒有病房-→4E
- Gum—黑線(lead lines)
- Blood pictures :Target cells. polychromasia, basophilic stippling,
- Occupation : 電池工廠工人.
- **Lead 檢驗:尿血-→公衛吳新英教授**
- **電池工廠調查及工作人員檢查**
- **(陳萬裕教授)**

Level 3: Childhood Lead Poi...
caryinstitute.org



Lead poisoning | eClinpath
eclinpath.com



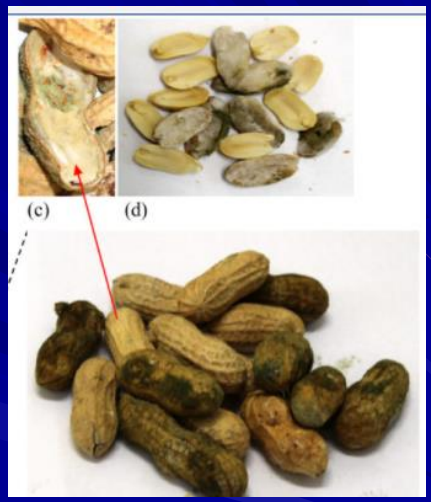
Lead poisoning

- 由於工廠排放的鉛塵飄浮物，離地面約一公尺，正好就是一般兒童的高度，導致上百位兒童身體遭到污染，血液含鉛量超過標準，
- ---中國安徽省驚傳發生兒童集體鉛中毒事件(2011)
- 台中市前老議長張宏年及議員兒子張彥彤一家四口，驚傳鉛中毒全家住院，三立新聞網2020年8月1日·生活中心／陳佳鈴報導
- 如果要幫家中重新**粉刷油漆**，**請選擇不含鉛的環保漆**，在除漆時，也記得戴好呼吸道防護具。帶小朋友去公園玩時，遇到有油漆剝落，玩耍後記得洗手。如果家中水龍頭很久了，可以考慮更換，因為除了鉛水管，鉛水龍頭也是很大的問題。
- 工作中，如果會接觸到鉛，請每年接受鉛作業健康檢查；在工作現場，記得戴好防護具，用餐時手部清潔作好，工作服和家居服記得分開，或是公司願意照顧員工，則**工作服由公司統一送洗**。如果還是擔心自己鉛中毒，多數大醫院都有提供自費重金屬檢驗，可以考慮利用。

醫療問題常因生活上之問題引起,因此也要**結合生活之改變**

原因5.多種原因,一一排除還不知 --searching.

- VS (P,1995?). Medical student, NTU (SC) Severe liver cell necrosis, causes ?,
- HAV, HBV, HCV and Hepatitis were excluded by serological markers.
- No medication at all.
- 姊姊是護理師,
- No Wilson disease.
- 家裡是花生農,有一天回家 10+pm才
- 到家,肚子餓,吃下飯桌上全部的煮熟的花生--那是媽媽檢剩不賣的花生-Aflatoxin induced liver cell necrosis-aflatoxin hepatitis-,(acute aflatoxicosis)



Aflatoxin危害人體是早就知道的事實

› Lancet. 1975 May 10;1(7915):1061-3. doi: 10.1016/s0140-6736(75)91829-2.

Hepatitis due to aflatoxicosis. An outbreak in Western India

K A Krishnamachari, R V Bhat, V Nagarajan, T B Tilak

PMID: 48730 DOI: 10.1016/s0140-6736(75)91829-2

Abstract

Parts of Western India have experienced an outbreak of hepatitis affecting man and dogs and characterised by jaundice, rapidly developing ascites, portal hypertension, and a high mortality-rate. The disease was associated with the consumption of maize contaminated heavily with Aspergillus flavus. Analysis of contaminated samples showed that affected people could have consumed between 2 and 6 mg. of aflatoxin daily over a period of a month. A specimen of liver obtained at necropsy showed bileduct proliferation and giant cells. The disease appears to be a result of aflatoxicosis.

Aflatoxin in Peanuts and Peanut Butter

Aflatoxins are toxic substances that are primarily produced by two types of mold: *Aspergillus flavus* and *Aspergillus parasiticus*. Virtually any plant-based food can become contaminated with aflatoxins if stored improperly, but peanuts seem to be particularly susceptible to contamination by these mycotoxins. The ability of aflatoxins to cause cancer is well-documented, but these toxic compounds have also been linked to a wide range of other diseases and health problems including impaired immune function, cardiovascular problems, nutrient deficiencies, gastrointestinal problems, and growth impairment in children. Many different types of aflatoxins can contaminate in peanuts, with aflatoxin B1 being the most dangerous type.

Source: https://www.healwithfood.org/aflatoxin/peanuts-and-peanut-butter#ixzz763lmEGX8

原因6,原因不明 AF→multiple embolic attacks? → atherosclerosis by autopsy

- R1 (4E) 416-1床 余張00女士.42歲女性 RHD, (MS+MI) +CHF +AF
  - CVA(Due to AF)→Coronary attack, poor progression of R waves (coronary embolism)-→ Pulmonary infarct
  - **Autopsy(感謝她及她的家人) –Prof,陳海清**
    PA 像繩子一樣硬—diffuse atherosclerosis (CPC)
  - **現在還是個謎,(未証實hereditary hyperlipidemia)**
  - **問吳俊重老師 "有可能"**

Review › J Clin Lipidol. May-Jun 2016;10(3):490-6. doi: 10.1016/j.jacl.2016.01.009. Epub 2016 Feb 19.

Genetic diagnosis of familial hypercholesterolemia in Han Chinese

Kuan-Rau Chiou [1], Min-Ji Charng [2]

Affiliations – collapse

Affiliations

1 Faculty of Medicine, School of Medicine, National Yang-Ming University, Taipei, Taiwan, R.O.C; Division of Cardiology, Department of Medicine, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, R.O.C. Electronic address: krchiou@hotmail.com.

2 Faculty of Medicine, School of Medicine, National Yang-Ming University, Taipei, Taiwan, R.O.C; Division of Cardiology, Department of Medicine, Taipei Veterans General Hospital, Taipei, Taiwan, R.O.C. Electronic address: mjcharng@vghtpe.gov.tw.

One in about 200 adults have the FH genetic mutation. Including children, FH affects about 1.3 million in the U.S. But only about 10% are aware they have it.

Genetic Diagnosis via Whole Exome Sequencing in Taiwanese Patients with Hypertriglyceridemia Kuan-Rau Chiou [1], Chung-Yung Chen, Min-Ji Charng

Conclusions: Our results demonstrate that WES is feasible for identifying the genetic locus that causes hypertriglyceridemia. The TT genotype of APOA5 c.553G > T acts as an important indicator of hypertriglyceridemia in patients in Taiwan.

Changgeng Yi Xue Za Zhi. 1999 Sep;22(3):460-7.

Identification of familial hypercholesterolemia in Taiwan: report of eleven cases

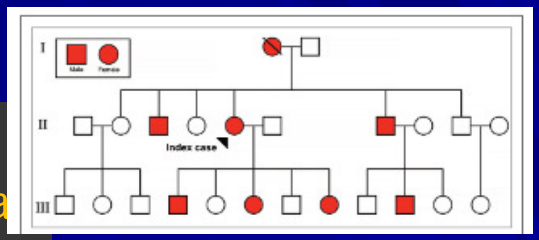
M H Chung [1], K W Chen, J F Chen, W T Lu, J H Sun, J D Lin

Affiliations – collapse

Affiliation

1 Department of Internal Medicine, Chang Gung Memorial Hospital, Taipei, Taiwan, R.O.C.

Familial hypercholesterolemia is a disorder that is passed down through families. It causes LDL (bad) cholesterol level to be very high. The condition begins at birth and can cause heart attacks at an early age.



Coronary heart disease was confirmed in one patient and old CVA was noted in another 2 patients. The mean total cholesterol level wa 390.3 +/- 88.9 mg/dl and the mean low density lipoprotein-cholesterol (LDL-cholesterol) level was 309.6 +/- 89.9 mg/dl before treatment. After a mean treatment duration of 45.2 months, the mean total cholesterol level and LDL-cholesterol level were 326.8 +/- 87.8 mg/dl and 249.1 +/- 91.1 mg/dl, respectively.

Monogenic autosomal dominant genetic disorder

家族性高膽固醇血症
(FAMILIAL HYPERCHOLESTEROLAEMIA, FH)
患者指南

FH患者人數比例介於1/200人至1/500人

原因:7.考慮環境因素,得病原因霍然開朗

病人的**排便桶子**興起抽水**坐式馬桶**的概念

- 民國60年7月颱風暴雨三重淹水.
- 糞坑內容外溢→-細菌污染食物及飲水→ 胃腸道傳染病可能爆發
- 兼任vs(1971)(台北市立傳染病醫院醫務科主任), 超前部署 C-disease guidelines:

-ONE DAY in the afternoon(1972), at 4pm, a man was sent to
our hospital with whispering voice and sunken eyeballs
→ shock.
It was a case of severe dehydration due to cholera—
treatment guide for C-enteritis was initiated.

Typical dehydration

	No or minimal dehydration	Moderate to severe dehydration
General appearance	Alert	Restless, lethargic, unconscious
Capillary refill	Normal	Prolonged or minimal
Tears	Present	Absent
Mucous membranes	Moist	Dry, very dry
eye	Normal	Sunken, deeply sunken
breathing	Present	Deep, deep and rapid
Quality of pulses	Normal	Thread, weak or implapable
Skin elesticity	Instant recoil	Recoil slowly; recoil > 2 seconds
Heart rate	Normal	Tachycardia
Urine out put	Normal	Reduced, not passed in many hours

兩眼深陷,皮膚黝黑,虛弱、聲音低弱深沉、嗜睡Rice water diarrhea /every 30 min

No mortality/ 384 cases. (1972)

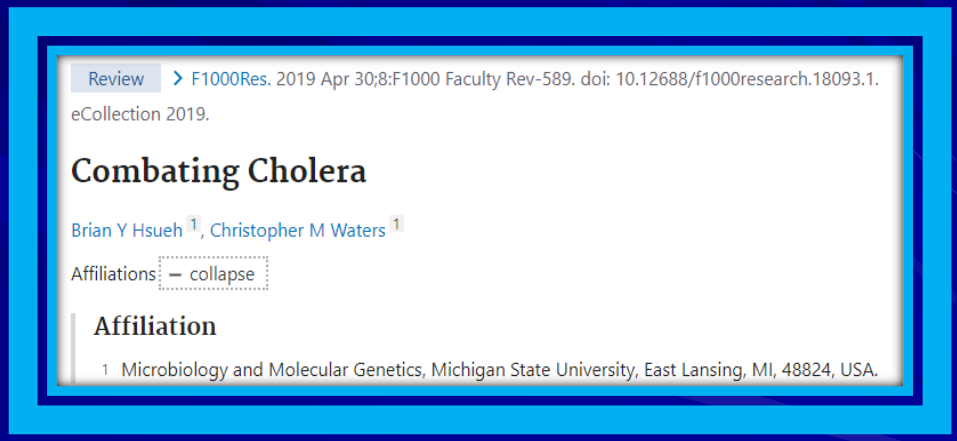
Management of patients with cholera involves aggressive fluid replacement; effective therapy can decrease mortality from more than 50% to less than 0·2%.(2012, JB Harris et al, MGH)

Treatment of cholera

Treatment
Isolation
Prevention
+ Good environmental hygiene, esp.feces disposal
馬桶的興起
-→建議坐式馬桶之應用
1971年算是很新的想法、

20世紀六十年代抽水馬桶開始在歐美盛行，後來傳到日本、韓國等亞洲國家。

馬桶正式名稱為座便器，古代原名虎子又叫子孫桶；至唐代，由於要馬桶的相冊(20張)避李世民祖父，李虎的諱，故改名為馬子，至現代後，才改稱馬桶。馬桶的發明被稱為一項偉大的發明，它解決了人自身吃喝拉撒的進出問題。後來又演變為利用虹吸、螺旋虹吸等原理的抽水馬桶。也有人認為抽水馬桶是萬惡之源，因為它消耗了大量的生活用水。



Review > F1000Res. 2019 Apr 30;8:F1000 Faculty Rev-589. doi: 10.12688/f1000research.18093.1. eCollection 2019.

Combating Cholera

Brian Y Hsueh [1], Christopher M Waters [1]

Affiliations – collapse

Affiliation

1 Microbiology and Molecular Genetics, Michigan State University, East Lansing, MI, 48824, USA.

霍亂 – 低收入國家的地區性流行病

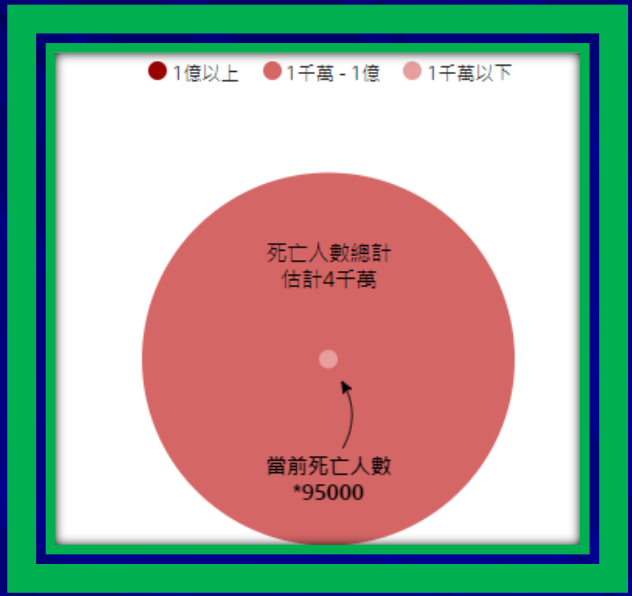
到目前為止曾多次爆發疫情，1817年有一次大流行

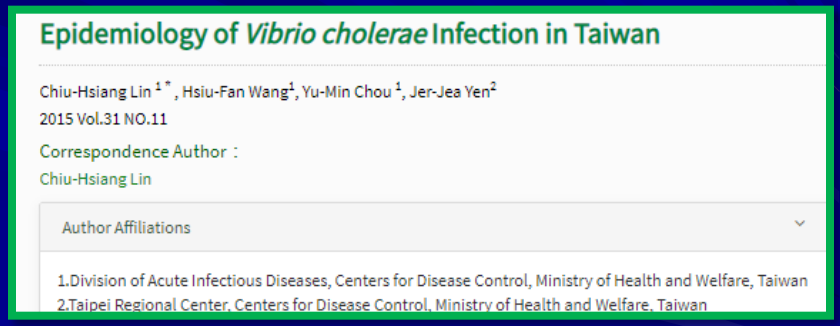
再後來，約8代人之前，賈莉莉的祖先經歷了霍亂瘟疫。

霍亂通過被病菌污染的食物和水傳播。世界衛生組織（WHO）資料顯示，歷史上發生過7次霍亂大流行，奪走了數百萬人的生命。

雖然發達國家衛生條件較好，消除了霍亂流行的威脅，但許多低收入國家霍亂仍較常見，或經常出現地區性流行疫情。 WHO數據顯示，每年有10萬到14萬人死於霍亂。

霍亂曾奪走數以百萬計的生命，現在死亡人數仍成千上萬





No cholera epidemics have occurred in Taiwan since a severe outbreak caused by V. Cholerae serogroup O1 occurred in 1962. Although, during the period 1962-2013, several cholera infections have occurred, only a few are cluster infections and most of the reported cases are sporadic.

完全忘了1972的霍亂大流行以及我們的建議、從此50年相安無事
--家庭普遍應用馬桶的功勞

找出致病之因 (Roots of the disease)。

- 應該是醫師之職責,但有時不是一個容易達成的目標,住院過程中要繼續努力思考,找出答案.沒多或少可以得到答案

The search for the causes (etiologies) of human diseases goes back to antiquity. Hippocrates, a Greek physician of the 4th and 5th centuries BCE, is credited with being the first to adopt the concept that disease is not a visitation of the gods (天譴)but rather is caused by earthly influences. Scientists have since continually searched for the causes of disease and, indeed, have discovered the causes of many.

Hippocrates : The Father of Medicine

入院時的問題,到出院時尚未完全明白

很幸運、在台大有很多老師可以問,雖然有時候他會回答他也不知道。或有可能。您不會滿意。

解決問題(原因)

- 納入生活管理
- Life adjustment
- 1. Healthy food
- 2. Healthy living
- 戒菸戒酒,不嚼檳榔,
- 飲食,食品餐廳管理,
- 環保概念
- 戒絕毒品

- 納入醫療規範
- 教育:RRSOAP,
- POMR
- 健康生活門診:戒菸,戒酒,
- 不嚼檳榔.戒絕毒品
- 重視職業病防治
- 重視傳染病防治
- -------

4. Problem 發生時之危險因素 -risk measures, **which potentiates symptoms**

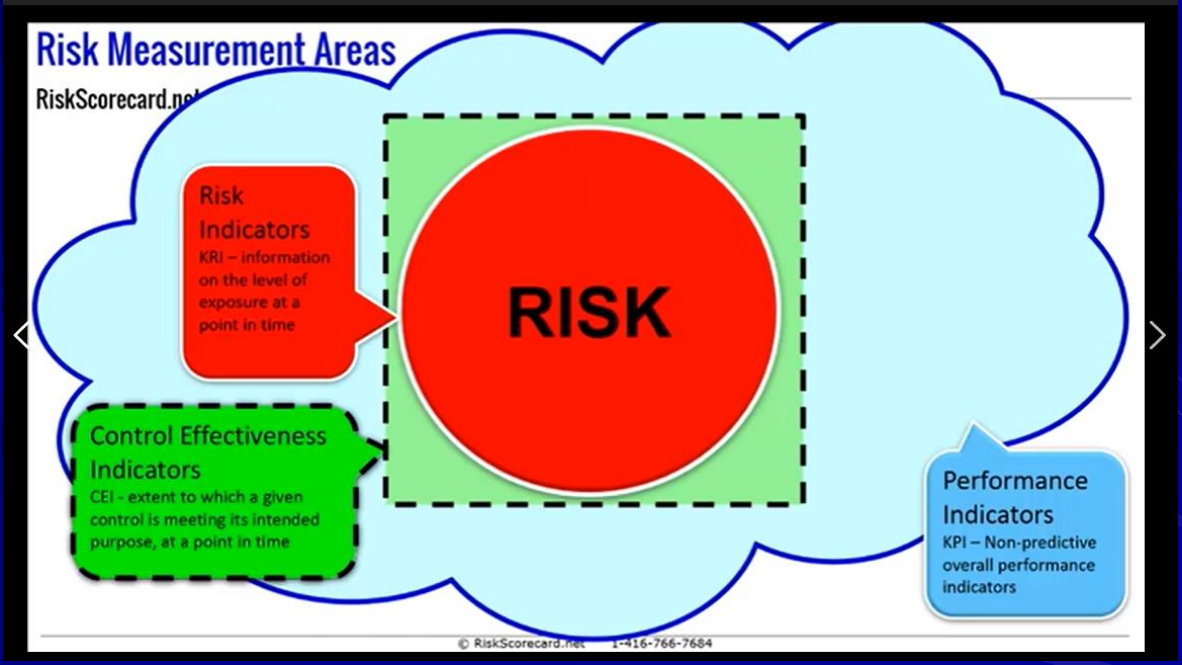
Definition of risk: 不同的問題,
Risk Grade 並不相同,

通常我們認定百萬分之一機會,
危險性很低。1 %就算高了

Grade	risk level	Probability
0.	No risk	0/1,000,000
1,	**very low**	1:1,000,000
2.	**low**	1:100,000
3.	Low to medium	1:10,000~1:100,000
4.	**Medium**	1:1,000-10,000
5.	Medium to high	1:1000~1:100
6.	**High**	**1:100**
7.	very high	1:10-1:100
8.	Extremely high	> 1/10

4. Problem 發生時之危險因素
-risk measures,
which potentiates symptoms

Prediction and evaluation-→知道問題的嚴重性-→知道盡量要去控制

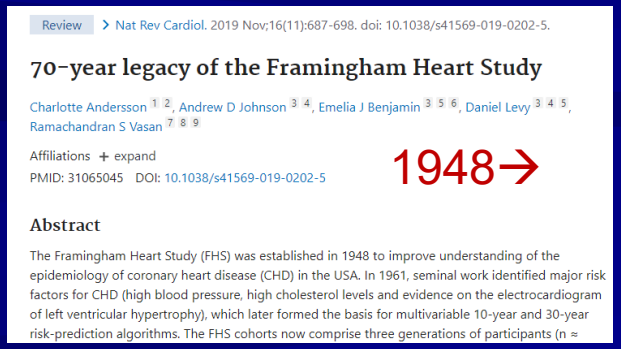


No risk
Low risk
Medium risk
High risk
Extremely high risk.

Risk 怎麼表現出來?
Risk 如何控制
Risk 是否已控制了

Risk事實上比Roots 複雜 Factors 更多

- In epidemiology, a **risk factor** or **determinant** is a variable associated with an increased risk of disease or infection.[1]:38]
- Risk /= causal relationship
- **Risk factors or determinants are correlational and not** necessarily causal, because correlation does not prove causation
- 相關不等於致病原因
- The term **"risk factor"** was first coined by former Framingham Heart Study Director, Dr. William B. Kannel in a 1961 article in *Annals of Internal Medicine*.



Review > Nat Rev Cardiol. 2019 Nov;16(11):687-698. doi: 10.1038/s41569-019-0202-5.

70-year legacy of the Framingham Heart Study

Charlotte Andersson [1 2], Andrew D Johnson [3 4], Emelia J Benjamin [3 5 6], Daniel Levy [3 4 5], Ramachandran S Vasan [7 8 9]

Affiliations + expand

PMID: 31065045 DOI: 10.1038/s41569-019-0202-5

1948→

Abstract

The Framingham Heart Study (FHS) was established in 1948 to improve understanding of the epidemiology of coronary heart disease (CHD) in the USA. In 1961, seminal work identified major risk factors for CHD (high blood pressure, high cholesterol levels and evidence on the electrocardiogram of left ventricular hypertrophy), which later formed the basis for multivariable 10-year and 30-year risk-prediction algorithms. The FHS cohorts now comprise three generations of participants (n ≈

Major risk factors in coronary heart disease : high blood pressure, High cholesterol level, ECG evidence of LVH

Kannel, W. B., Dawber, T. R., Kagan, A., Revotskie, N. & Stokes, J. 3rd. Factors of risk in the development of coronary heart disease—six year follow-up experience. The Framingham Study. *Ann. Intern. Med.* **55**, 33 – 50

ADR 的觀念大家都很熟悉
多少%會致命?

BJCP British Journal of Clinical Pharmacology

ORIGINAL ARTICLE

Fatal adverse drug reactions: A worldwide perspective in the World Health Organization pharmacovigilance database

Jean-Louis Montastruc ✉, Margaux Lafaurie, Claire de Canecaude, Geneviève Durrieu, Agnès Sommet, François Montastruc, Haleh Bagheri,

First published: 10 April 2021 | https://doi.org/10.1111/bcp.14851

43,685/3,250,967=1.34 %

Fatal ADRs registered in a large pharmaco-vigilance database during the last 10 years correspond to just over 1% of the total number of ADRs. They occurred more in males, after 65 years and with antineoplastic/immunomodulating drugs followed by nervous system and cardiac drugs

Among the 23 millions ADRs recorded in VigiBase, 3 250 967 were included with 43 685 fatal. They were reported mainly in patients older than 75 years. The 3 most frequently involved drug classes were antineoplastic/ immunomodulating drugs followed by nervous system and cardiac drugs. The top 3 individual drugs were denosumab, lenalidomide and thalidomide with marked differences according to age, sex, continents and countries. The risk of reporting fatal ADRs was higher in males, in the Americas and in patients ≥65 years.

Preventable ADR

Review > Eur J Clin Pharmacol. 2017 Apr;73(4):385-398. doi: 10.1007/s00228-016-2170-6. Epub 2016 Dec 2.

Hospitalizations due to preventable adverse reactions–a systematic review

Nidhi S Patel [1,2], Tejas K Patel [3], Parvati B Patel [4], Viren N Naik [1,2], C B Tripathi [1,2]

Affiliations – collapse

Affiliations

1 Department of Pharmacology, Government Medical College, Bhavnagar, Gujarat, 364001, India.

Of the 68 full-text articles assessed, we included 22 studies. The mean $PADR_{Ad}$ percentage was 45.11 % (95 % CI = 33.06-57.15; I^2 = 99 %). Studies including elderly (63.31 %) and all age groups (49.03 %) showed higher percentages than paediatric population (16.40 %). Studies examining all hospital populations showed higher percentages than specific wards. We observed high percentages in studies using Edwards and Aronson as an ADR definition and Hallas et al. as a preventability assessment tool.

The fatal $PADR_{Ad}$ percentage was 1.58 %

Hallas J, Harvald B, Gram LF, Grodum E, Brosen K, Haghfelt T et al (1990) Drug related hospital admissions: the role of definitions and intensity of data collection, and the possibility of prevention. J Intern Med 228(2):83–90

The avoidable drug events pointed to the primary health care physicians as the appropriate targets for preventive measures in terms of **intensified drug education**. The study demonstrated that a reliable estimate of the DRH rate requires **active data collection** by a qualified health service worker in close collaboration with the patient's family doctor in cases of suspected DRH.

Risk assessment

- 危險因素的評估是臨床醫師非常重要的工作.要發現, 同時排除才能夠減少問題
- 臨床醫師必須注意病史,身體檢查(PE),各種檢驗的結果以及影像所展示出來的問題.做一個綜合判斷.
- @@任何危險因素應記載在病歷顯著的位置(**最好是固定的欄位**)上讓所有參與醫療工作的人員都能夠注意

Early onset colorectal cancer

- dx before 50

- 1. persistent obesity and continuous abdominal
- obesity before the age of 50
- 2.Incomplete polyp removal
- hot snare polypectomy (HSP) are superior to cold snare polypectomy (CSP) in
- improving the complete removal rate.
- **3. LDH and NRL-LDH**
- **4. The neutrophil-to-lymphocyte ratio (NLR) stands out as a crucial monitoring indicator for CRLM (early colorectal cancer with liver metastases)patients**,

6. Burnett-Hartman AN, Lee JK, Demb J, Gupta S. An update on the epidemiology, molecular characterization, diagnosis, and screening strategies for early-onset colorectal 160:1041–9. doi: 10.1053/j.gastro.2020.12.068 cancer. Gastroenterology. (2021)

7. Imperiale TF. CRC screening with sigmoidoscopy extends life by 110 d; other cancer screening tests do not extend life. Ann Intern Med. (2024) 177:Jc9. doi: 10.7326/J23-0112

8. Pohl H, Anderson JC, Aguilera-Fish A, Calderwood AH, Mackenzie TA, Robertson DJ. Recurrence of colorectal neoplastic polyps after incomplete resection. AnnI ntern Med. (2021) 174:1377–84. doi: 10.7326/M20-6689

應該對postvaccination death 有一些想法

- Anaphylaxis —how to detect, history taking
- Enhancement of diseases after vaccination

  What kinds of diseases
- Poor quality of vaccines, and technical problems.(代工、運送、保存及應用)
- Accidental deaths, unrelated to vaccination.

  observation, weak elderly,
- **High risk** persons AGGRAVATED after vaccination, prevaccination assessment, history and previous records.

那些人不適合打疫苗要告知,-
這才是重點

- 工作人員有認真評估嗎?
- 醫院電子病歷是否立即顯示risk factors.
- 限制曾在本院有醫療紀錄者
- 不適合打,但給預約的權利
- 安全人員巡視、及時發現
- **充分休息,至少40 min. 才可離開,**
- 減少工作量,充分評估、
- 急救人員在場,及時救援可以減少死亡

如何發現危險因素:問看查

- History taking; allergy history, cancer, under active treatment
- PE: BMI> 33, BMI < 17, HR : 112/min. severe anemia (<8 gm/dl), Fever diseases, Hypertension(BP> 180 mm Hg.)
- Bleeding tendency,*Platelet count < 50,000, petechiae and ecchymosis
- Recent laboratory data ---Hb A1c >9 %
- TC: > 300, TG > 400, LDL> 150; **AFP> 200,**
- **BUN>50, Cr>3.0 , CRP>20/dl**
- Abnormal ECG showed major arrythmia, infarction and or ischemia
- -----

Reported cases died after vaccination

- Death : 6207/339,000,000 (US)
- 18.309/1,000,000
- 1.83/100,000---值得注意

  0.18/10,000

Vaccination death---6207
Covid-19 death---626701
x 100

台灣指揮中心*(2021.07.29)

Vaccination risk
1387/4,852,884
=2.85/10,000

2021.08.06:
注射疫苗死亡 578 cases
死亡率:0.0065 % (十萬分之6.5)
確診15765, 死亡794,死亡率5.036%
百分之**5.**

好好溝通說明、是職責也是消彌疑問、增加對防疫工作的信心

- 溝通是一個將事實、思想、觀念、感情、價值、與態度，傳給另一個人或團體的過程。它是一個複雜的過程，不僅可傳送訊息內容，也包括判斷訊息的意義。也是一種動力過程，像時間一樣，發生過後，不可能倒退，也不可能再重複，因此適時有效溝通是很重要的。

J Periodontal Res. 2018 Oct;53(5):785-792. doi: 10.1111/jre.12567. Epub 2018 May 18.

Periodontitis and dental scaling associated with pyogenic liver abscess: A population-based case-control study

Y-T Yeh [1 2 3], B-Y Wang [4 5], C-W Lin [3 6], S-F Yang [7 8], S-W Ho [4 5], H-W Yeh [9], J-Y Huang [7], Y-C Chang [1 2 3], C-B Yeh [4 5]

Affiliations — collapse

Affiliations

1 Graduate School of Dentistry, Chung Shan Medical University, Taichung, Taiwan.

Results: Periodontitis remained a risk factor for PLA among patients aged 20-40 years, with an aOR of 2.31 (95% confidence interval [CI] = 1.37-3.90, P = .0018). In addition, the average aOR for PLA was significantly lower among patients with one DS (aOR = 0.76, 95% CI = 0.59-0.96) and more than one DS (aOR = 0.61, 95% CI = 0.39-0.95) within 1 year before the index date.

Conclusion: According to these results, we concluded that adult patients with periodontitis aged <50 years old are more at risk for PLA than controls, particularly when they have no DS. Moreover, from 20 years of age, non-periodontal patients subjected to at least 2 DS per year are less at risk for PLA than controls.

@@所有的fever disease, sepsis, abscess, unknown fever都要詢問Dental care history--或許就可找到病源

Common risks in the aged persons

- 1. Common diseases without adequate control—
- DM, Hyperlipidemia, Hypertension,
- hyperuricemia.(UA>9 mg/dl), CAD, ----
- 2. Underline risk—aspirin, clopidogrel, and coumadin(all antiplatelet agents, anticoagulants)
- 3. Thrombocytopenia (<50,000)
- 4. Severe anemia (Hb< 8 gm/dl)
- 5. Unsteady gait and fall tendency
- 6. Others (aged >75)(living alone)(obesity)
- (no adequate physical activity)

Risk factors 是需要考量的
臨床處置上很重要的一部分

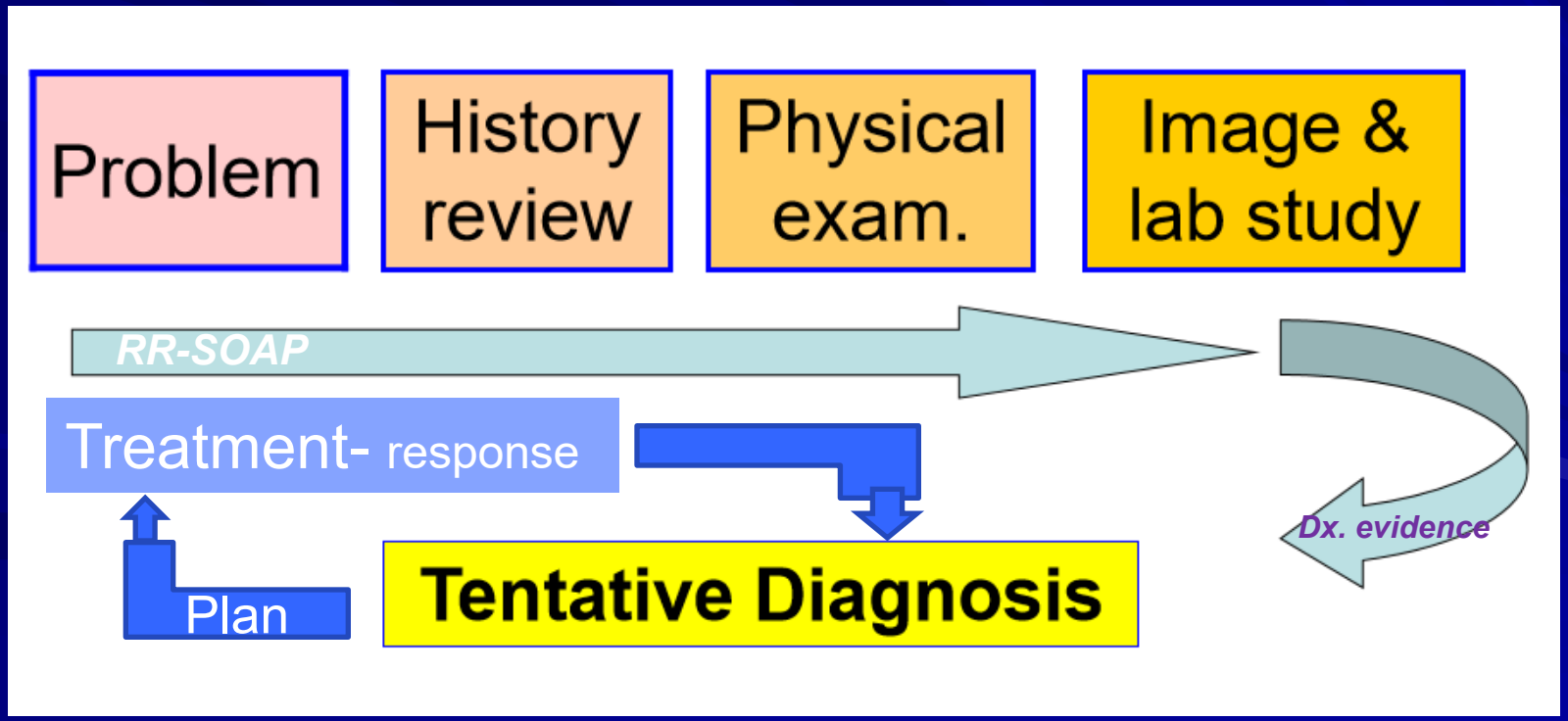
- 臨床處置上:
- 發現危險因素,後如何消除降低風險.列為要務
- Ex. Antiplatelet agents要暫停使用
- EX. DM control.
- Ex. Obesity及早減重降低風險
- 告知如何注意,可以減少傷害,如何處理,可以消除危險因素

病情→診斷確定→診療→健康

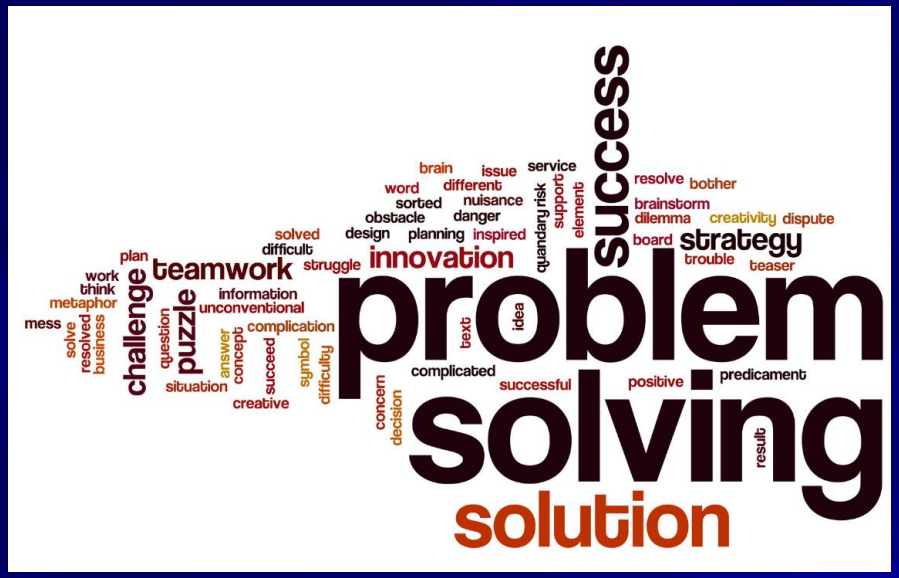
檢查/用藥/手術/特別處置

病歷 書寫/紀錄

思考及評估assessment,問題的發生及解決



Problem based study



Problems
Challenge
Solution
Teamwork,
success

Problem list
Assessment
management

- Problem list
- Problem description
- R: roots
- R: risk
- S: symptoms
- O:objective findings
- A: assessment
- P:Plan

Assessment:

- **Risk factors:** 病人存在哪些危險因素
- Diagnosis—Dx. Evidence:診斷依據
  Severity –and outcome
- Therapeutic choice–不同治療方法之優劣點
  advantages and disadvantages
  attending的意見及選擇也應告知
- Therapeutic response,
  效果的評估要客觀,有依據,誠實告知

找出病因,發現存在的風險因素

- 依據解決問題的思考羅輯及相關之証據作出診斷

告知處理原則及可能的各種選擇
利弊得失,成功機率,後續之問題

詳細說明溝通並回答病家之疑問--雙方達成共識

積極處置(active treatment)進行客觀評估效果,及必要之改變

如何進行洽當得宜的治療

- 1.有賴主治醫師豐富的臨床經驗,
- 2.細心觀察評估效果,及時作適當之改變
- 3.Team合作及專家的會診.
- 4.引進最新的治療理念及方式,獲得最好的
- 效果及最少的損失(Organ damage and
- functional loss) 在院期間(length of stay)
- 短,合併症最少,經濟負擔最輕.

Study through case conference(team)

Protocol
Problem.
Dx
Mx
Initial response
Next.

集合眾人仔細討論可以獲得更深入而且可靠的意見

VS round, Morning meeting

Case conference, Grand round.

@@@將開會的重點以及處置的建議清楚記載在病歷上

Team conference重點參加者

- **Chairman--主持人**
- Presentation—學員之一,負責報告
- Audience 聽眾,同事、同學,
- 老師、**Instructors**, faculty staffs..
- Invited specialists.參予深入的討論,有權威
- 觀眾,見學者—only observe.聽及學.

病情(Problem):**真實的病情, 親自問的**,
不是想像的,不是自我編造(想自圓其說)

Analysis--- RR SOAP

Watch deterioration 病是多變的,
小心惡化的開始,要及時處置,改變

病情惡化總是有原因的, 要面對要解決

- Watch deteriorated signs—Clinically downhill
- Anemia—increased
- Jaundice increased
- Bleeding continued
- Shock and comatous state : continued.
- Pulse : increased (>120/min.)
- Anuria or oliguria persisted(<30 ml/hour)
- Dyspnea /shortness of breathing
- Sweating and diarrhea without response.

Disease activity parameters need regular **follow up.**

老師經驗豐富對疾病評估指標之選擇也會比較正確

- Acute pancreatitis Disease activity parameters
- (1) Epigastric pain, severe,
- (2) Epigastric tenderness with diminished bowel sound but no rebound tenderness
- (3) Vital signs : O.K.
- **(4)** Amylase: 340 *(4) Lipase : 800
- (5) Ca: 8.9 mg/dl (borderline)---→7.3 (2 days later)
- (6) CRP : 0.2(8 hours after onset)-→5.4 (2 days later)
- (7) BUN: 17 (normal)—LDH: 340
- (8) Abdominal CT : not done yet

necrotizing

Time factor

治療效果總是要判斷:Judgement

- Improved
- Improved much
- Almost healed, healed
- About the same, no improvement at all
- Worse.
- Became more serious
- Critical
- Fatal

@@病例討論會必須要寫下開會的結論.以及以後的改變

- **1. 開會的結果要記錄.**
- 寫下重點
- 特別是診斷依據
- 以及病人處置上必須注意的特殊地方
- **2.@@臨床的判斷要記錄**,特別是比較困難
- 複雜的案例.
- 是好,是壞都要明確寫出來
- 好可以繼續, 壞就要想辦法改變.

想法/作法是會改變的
醫學是進步的治療規範也會改變

- Simple disease/or complicated disease.處理方式不同—follow up observation
- Time –1980/2020方式不同
- New drugs效果不同
- Technology 不同—1971/2020 colonoscopy
- 內科/外科醫師想法不同-→Consultation

Literature review
Reading
CME
Team conference and discussion

開會的結論不滿意你就要再查其他的文獻
→Read more：

IJCCM Indian Journal of Critical Care Medicine
Official Publication of Indian Society of Critical Care Medicine

Home
Current issue
Instructions
Submit article

Indian J Crit Care Med. 2016 Mar; 20(3): 173–177.
doi: 10.4103/0972-5229.178182
PMCID: PMC4810896
PMID: 27076730

Hypocalcemia in acute pancreatitis revisited

Armin Ahmed, Afzal Azim, Mohan Gurjar, and Arvind Kumar Baronia

Abstract

Go to:

Hypocalcemia is a frequent finding in acute pancreatitis. Severe hypocalcemia can present with neurological as well as cardiovascular manifestations. Correction of hypocalcemia by parenteral calcium infusion remains a controversial topic as intracellular calcium overload is the central mechanism of acinar cell injury in pancreatitis. The current article deals with the art and science of calcium correction in pancreatitis patients.

Keywords: Acute pancreatitis, calcium, hypocalcemia

You may be not satisfied with this.
Check full text or another reference from internet.

Consultation and case conference

@@照會是很重要的過程一定要清楚敘述照會者的意見

- 照會其他醫師時必須隨同前往看診.可以了解照會醫師的意見.有問題也可以在旁請教,隨時補充臨床結果給照會醫師參考.
- 照會的結果也要明白敘述.如果臨床處置因而改變(orders)也需要記錄在病歷上.
- 出院摘要(discharge summary)也應該特別敘述照會的結果

Summary(摘要)(2024/04/19)

- 1. Problems 是臨床診療的核心,也是病人最關切的
- 重點
- 2.好好瞭解病人的problems.、而且列表時時提醒注意
- 3.Problems由症狀(群)及發病之時間組成,依重要性依
- 次排列,分別處置
- 4. problems 一定區分為active or inactive.住院中會有
- 改變.疾病之變動仰賴assessment parameters評估
- 5.problems分析應RRSOAP之程序進行,確立診斷時併列診斷依據.治療反應不佳時,要思考改變.改換
- 6.Case conference是解決困難之問題最好的方式, 也
- 是臨床學習最直接及有效的方法