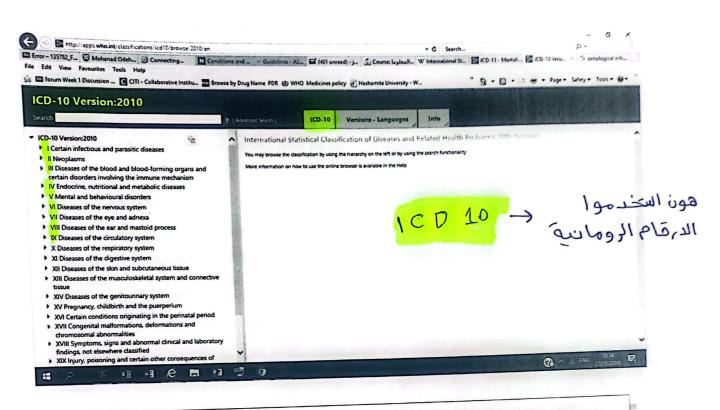
INTERNATIONAL STATISTICAL CLASSIFICATION OF DISEASES AND RELATED HEALTH PROBLEMS

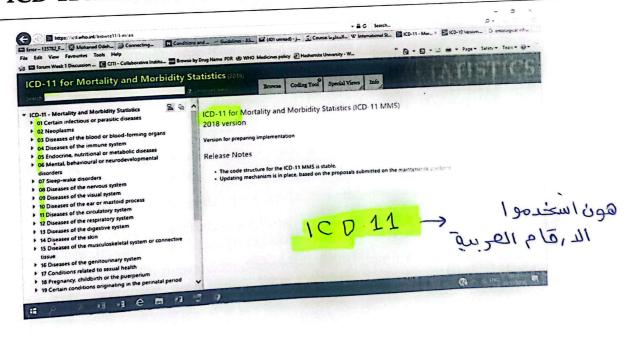
ICD 10, has been used since 1999 – 2010 – 2018 http://apps.who.int/classifications/icd10/browse/2010/en

Wow ICD 11 has just been released in 18 June 2018 https://icd.who.int/browse11/l-m/en

مع الوقت هوه بيطور
يعني مابعنل بدفس اله العالم المعاد العاماء العاماء المنوات العاماء العاماء المناز (ICD 10) الى المناز (ICD 10) الى المناز (ICD 11)



ICD-11 MORTALITY AND MORBIDITY STATISTICS



ICD-11 MORTALITY AND MORBIDITY STATISTICS

About 300 specialists of 55 countries, organized in 30 main working groups have provided their input to make ICD-11 scientifically up-to-date.

Structural problems that became apparent using ICD-10 have been solved.

ICD-11 is much easier to use than ICD-10.

Its ontological infrastructure allows for an improved user guidance compared to ICD-10.

ال (ICD-11) والـ (ICD-10) والـ (ICD-11) :

قراد (ICD-11) حتى يخلوه (up to date) عنى يخلوه (ICD-11) اشتغلوا عليه واعليه (300 specialists)

many healthcare وقعت المنتفاء (pharmacist) سب شون و بعثني مش بس المنتفاء ا

ے طبعا ً ای (IcD40) کانت برال(structural problems) حلوها بر ال (ICD-11)

XICD-11 is much easier to use than ICD-10.

ع مندا (TcD-10) لما نفتع علية بندة (TcD-10) في عنا مند (different codes) في عنا مند (TcD-10) في عنا مند (المحالات الله (Gastrointestinal diseases) في عنا مند (المحالات الله (Gastrointestinal diseases) مفتلف عن عدول اله (Code) كا (group) كال (code) الذخر ؟

ے بتالی الے (structural problems) الیکانت موجودہ برال (ICD-10) حلوها برالہ (ICD-11)

ے بتالی استخدام الد (ICD-11) هوه السهل من استخدام الد (ICD-10).

ICD -11 SOME FEATURES

ICD-11 has new chapters:

Chapter 3 Diseases of the Blood and Blood-forming Organs.

<u>Chapter 4</u> Disorders of the Immune System.

Chapter 6 Conditions related to Sexual Health.

Chapter 8 Sleep-Wake Disorders

<u>Chapter 26</u> Extension codes (These categories should never be used in primary coding. They are provided for use as supplementary or additional codes when it is desired to identify more detail in diseases classified elsewhere)

Chapter 27 Traditional Medicine (Chinese, Japan and Korea)

And have special chapter that help assess Quality of life measurement

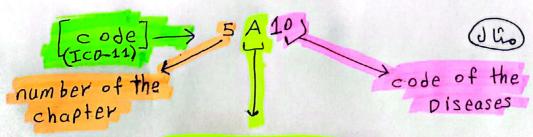
SOME DIFFERENCES IN ICD 11

- The chapter numbering:

 now Arabic numbers –not Roman numerals
- ❖The coding scheme for categories: -now minimum 4 characters -2 levels of subcategories
- ✓ Coding scheme –always has a letter in the second position to distinguish
 from the codes of ICD-10.
- ✓ First character of the code always relates to the chapter number. -1-Z

For example Type 1 diabetes without complication (In ICD-11 all types of diabetes are described in detail (there are more than two of them).

From E10.9 insulin dependent diabetes to 5A10 type 1 diabetes



Distinguish between (ICD-10) and (ICD-11)

SOME DIFFERENCES IN ICD 11

<u>ICD-10</u> had a range of expressions to describe a causal relationship between conditions in a code title. In <u>ICD 11</u>, the preferred term is "due to".

LCD-10 had a range of expressions indicating the coincidence of two conditions in a code title (e.g. "in" or "with"). In ICD-11, the preferred term is "associated with".

منان معدده بنالي هية (TcD-10) كانت متعدده بنالي هية (Confusing)

- المعيزه الثالثة لله (ICD-11) -:

(due to) استخدموا (due to)

(Smoking) مند اذا عندی مند در ondition (1) کی مند ادا (smoking) کے سببہ کے دو on dition (2) کی سببہ الـ (smoking)

a sthma جو بند صارعند عدم المناواحد صارعند عدم المارك

قِيمسب ا يُفِهُ (Cause) كاه مِه مهوم مِهانيل جـ (causal relationship between conditions)

(range of expressions) source (ICD-10) | L

ح يعنى العضوم الم عضات متعددة

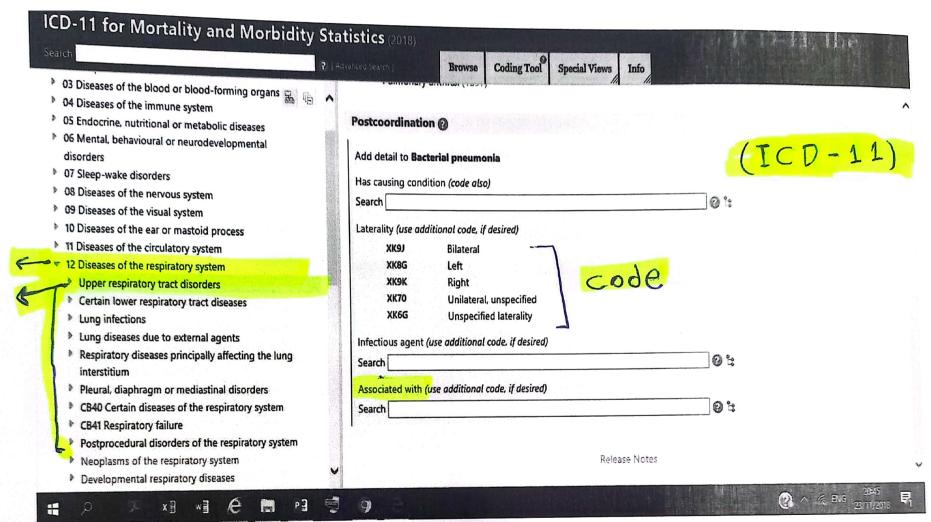
ے کن برالہ (IcD-11) فقط استخدموا مصطلح واحد ے الی هوه (due to)

م الدسي بنالي هذا الدسي بخفق الـ (confusing)

€ (ICD-11) U aeilyl ojudi ←

به بالـ (TcD-11) اذا بدهم يوهنوا الله حدون الـ (two conditions) مع انه بالـ (two conditions) حدثوا بنفس التوقيت كانوا ببنفس التوقيت كانوا ببر الـ (TcD-11) يستخدموا (associated with)

ے مکن بر الـ (Ico-10) کانوا یستخدموا



main chapter &

ICD-10 Version:2010 Search ? [Advanced Search] VI Diseases of the nervous system ICD-10 **Versions** - Languages VII Diseases of the eye and adnexa 1 International Statistical Classification of Diseases and Related Health Problems 10th Revision VIII Diseases of the ear and mastoid process (ICD-10) Version for 2010 IX Diseases of the circulatory system (ICD-10) X Diseases of the respiratory system ▶ 300-305 Acute upper respiratory infections Chapter X ▶ J09-J18 Influenza and pneumonia Diseases of the respiratory system (300-399) J20-J22 Other acute lower respiratory infections ▶ 130-139 Other diseases of upper respiratory tract Note: When a respiratory condition is described as occurring in more than one site and is not specifically indexed, it should be classified to ▶ J40-J47 Chronic lower respiratory diseases the lower anatomic site (e.g., tracheobronchitis to bronchitis in J40). ▶ J60-J70 Lung diseases due to external agents ▶ J80-J84 Other respiratory diseases principally affecting Excl.: certain conditions originating in the perinatal period (P00-P96) the interstitium certain infectious and parasitic diseases (A00-B99) ▶ J85-J86 Suppurative and necrotic conditions of lower complications of pregnancy, childbirth and the puerperium (000-099) هون طویل respiratory tract congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) ▶ J90-J94 Other diseases of pleura endocrine, nutritional and metabolic diseases (E00-E90) ▶ J95-J99 Other diseases of the respiratory system injury, poisoning and certain other consequences of external causes (500-T98) XI Diseases of the digestive system neoplasms (C00-D48) symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) XII Diseases of the skin and subcutaneous tissue XIII Diseases of the musculoskeletal system and connective This chapter contains the following blocks: tissue <u>100-106</u> Acute upper respiratory infections XIV Diseases of the genitourinary system Influenza and pneumonia XV Pregnancy, childbirth and the puerperium 320-322 Other acute lower respiratory infections XVI Certain conditions originating in the perinatal period Other diseases of upper respiratory tract <u> 130-139</u> X

ICD-10 Version:2010

② ∧ € ENG 20-27 25,[11/2018

COMORBIDITY AND CHARLSON COMORBIDITY INDEX

> The term "comorbid" has three definitions:

- 1. to indicate a medical condition existing simultaneously but independently with another condition in a patient (this is the older
- 2. to indicate a medical condition in a patient that causes, is caused by, or is otherwise related to another condition in the same patient (this is a newer, nonstandard definition and less well-accepted).
- 3. to indicate two or more medical conditions existing simultaneously regardless of their causal relationship.

-8 (comorbid) 21 and to

انه فیه (two conditions) حدیوا بینفس الوقت ، ولکنهم مش . نیوه (patient) ب نفوید نیامت

قعة (medical condition) ينه عنه عنا (indicate) ميه بتالي هيه المانية المانية عنه عنا (indicate) (related to another condition in the same patient)

indicate two condition) un go oga is og of (indicate two or more medical conditions)

(their causal relationship) النظر عن الـ (their causal relationship)

s(cause) السف بمها عمه (two or three medical condition) يعلم عنا ح s (causal relationship) त्वनाध्या पेव

(causal relationship) - 11 is this wint

انظر عن همه ایش ال (cause) ای عملوها النظر عن همه ایش ال · (comorpig) Lagramin 1070 * =

نالاه (two condition) کی شه (comorbid) اید الاهادی در الاهادی الاهادی در الا (two or more medical condition)

(patient) حديو بنفس الوقت لكنهم (independently) حديد بنفس الـ (patient)

```
> charlson comorbidity index=(CCI)
 بيه طينا الـ (Index) تبع الـ (comorbidity) تبع الـ (ndex) ومين (patient) ومين (patient) مختلفة عن الـ(patient) (patient) واله (score) مختلفة عن الـ(patient) والدّ في
                 -> is a method of categorizing comorbidities
                      of patient
                   بالدعتماد على (indernational classification)
                        of Diseases ICD /
                      Viagnosis code
                           الي بتكون موجوده بر (Specific data)
                                    ك (patient) عند (comorbidity index) مختلف عن المتاني (comorbidity index) المتاني
                        اله (risk) حبع اله (comorbidity) اولتبع اله
                        (mortality)
                           ues (comorbidities) el (condition) de specific score)
                 [(HF) + (DM) + (HTN)] o inc (patient) 11 1 is given (
                    (comorbiditie score) all (specific condition)
      (comorbidities) ليع الد (weight) الم يفود مه بعض وابطلعوا الد (weight) الم
              عليه و قليلة (comorbidities) علاه علية أو قليلة
× score zero →(comorbidities) сле грана Фи (indicate)
                                                                 هوه
                                        [A mortality A score] *
```

- CCI provides a simple, readily applicable, and valid method for classifying comorbidities and predicting the mortality.
- ❖It predicts life up to 10 years. Too many online calculator are available
- *Age Adjusted CCI
- ✓ Add:
- 1. 0 if 50-59 years
- 2. +1 if 60-69 years
- 3. +2 if 70-79 years
- 4. +3 if ≥80 years
- **❖10-year survival** 0.983[^](e^{aCCI × 0.9}), where aCCI = age adjusted Charlson Comorbidity Index

acci >

(Predicting the mortality) lillagy

بيلاقي على الـ (website)

too many online calculator

هيه موبس بتحسب الـ (Comorbidities) كل (Diseases) خ المالية لانه بيعتمد على الهذاء الشيء الشيء السق (Age Adjusted CCI)

یعنی اذا کان اله (patient) عمره رسم من 50 الی 59 سنجم بیعطوه

- من 60 الى 64 سنه ب لدزم بزيد عليها (1)
 - م من 70 الى 79 سنه م درم بزيد عليها (2)
- کی اکبراویساوی 80 سنجے لائم نئ بدعلیھا

! (10-year survival) ا ا ال في في الم

بيسبوها عن طريق السخدام هاي الـــ (e quation) ___ا السخدام هاي السخدام

(a ccI = age adjusted charlson comorbidity index)

★CCI → (patient specific) que

الي عند اله (comorbidity conditions) الي عند اله (patient) واله (Patient) واله (patient) واله (patient) الم عند عند اله (patient) الم عند عند با برونه كمان بيعتد على اله إلى اله

Condition	cod e	Weig
Diabetes without complications		1
Diabetes with complications		2
Liver disease Mild		1
Liver disease Moderate to sever		3
Malignancy (Lymphoma, Leukaemia, localised		2
Malignancy (metastatic)		6
Paraplegia and hemiplegia		2
Renal disease		2
AIDS	-	4

Condition	code	Weig
Myocardial infarction		1
Congestive heart failure		1
Peripheral vascular disease		1
Cerebrovascular disease		1
Demenda	1	ti
Chronic pulmonary disease	+	1
Connective tissue disease/rheumatic	1	11
Peptic ulcer disease	-	1

CCI scores of I-2; moderate, with CCI scores of 3-4; and severe, with CCI scores ≥5.

مىلك

DM without complications

م اذا معاه

1) = Score ogbel

ے وکان عمرہ من (60 الی 64) بمنیفو

€ لهیاد

ع وانفس الطريقة لي الـ (other condition) لي وانفس الطريقة لي الـ (condition) عين علا (weight) ما الدحظوا انه كل (weight) ما الله الله كل (weight)

mild grammannamanna _ o jesen o

moderate ← (4313 is) ← (ccI) ← (score), *

OTHER CODING SYSTEMS

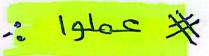
1. AHFS Drug Information (AHFS DI).

﴿ راح نکي عن ۾۔

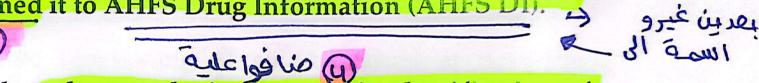
- 2. Current Dental Terminology (CDT).
- 3. International Classification of Diseases for Oncology (ICD-O).
- 4. International Classification of Functioning, Disability and Health (ICF).
 - 5. Coding Systems for Nursing Practices:
 - ➤ The North American Nursing Diagnosis Association (NANDA).
 - > Nursing Interventions Classification (NIC).

W AHFS DI

The American Society of Health-System Pharmacists (ASHP) developed the American Hospital Formulary Service (AHFS) to provide uniform identification and description of drugs in 1959.



Later on, it renamed it to AHFS Drug Information (AHFS DI).



ASHP developed a pharmacologic-therapeutic classification of drugs for building AHFS DI. The classification is based on pharmacologic, therapeutic, and chemical characteristics of a drug.

(Pharmacist) Il ais indemo 1 jule

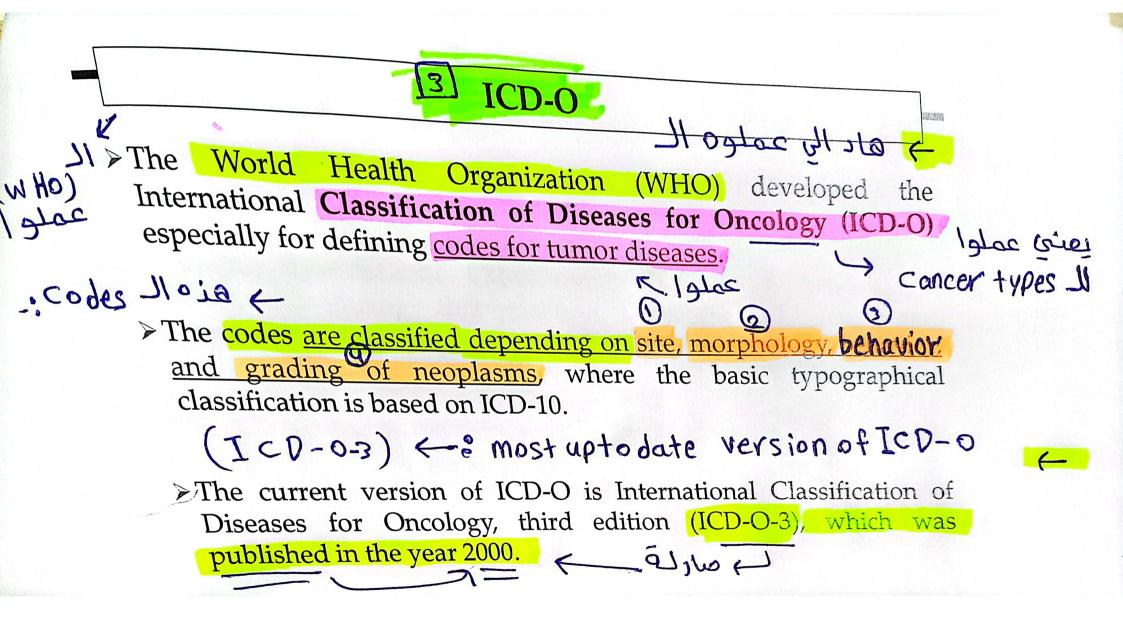
2 CDT

· ineo(code) ogber drug 15916

American Dental Association (ADA) to provide standard code sets for documenting and transferring precise information of dental procedures and services performed. In addition to guidelines and instructions for using the codes, instructions for filling dental claims, and other relevant knowledge for practicing dentistry.

performed by different healthcare providers on a patient, where the healthcare data of the patient are stored at a common place such as a regional/national healthcare store.

(patient specific) Que (CDT) *



(Y) (ICF)

International Classification of Functioning, Disability and Health (ICF) was developed by the WHO with endorsement of the World والماء الماء ال

The codes define functioning of an individual at body level (activities of body parts), individual level (activities performed by him/her), and social level (activities performed in all areas of life).

It also describes the environmental factors affecting functionality of an individual [ICF].

5 NANDA

ے فی عنا اکثر من واحد (NANDA).

The North American Nursing Diagnosis Association (NANDA) was founded in 1982 with the development of the MANDA codes for providing classification of nursing diagnosis.

* NANDA-I codes (provide) a description of diagnosis, signs and symptoms, and cause/associated risk factors.

م يعني الـ (nursing) مثلاً :- كان عند ها (HTN patient) عانت المصود (syptoms) عن الـ (signs) المثلاً عن الـ (diagnosis) عن الـ (signs) والرش هية الـ (associated risk factors) وايش هية الـ (associated risk factors) وايش هية الـ (specific code) عمل الشئ كانوا يعطوة (specific code)

-8 nursing classification system 25 2 NOC

المعاملة ال outcome) depending on nursing intervention.



> All three coding systems (i.e., NANDA-I, NIC, and NOC) Work in conjunction with each other and aim to provide a comprehensive system that covers all clinical coding related to nursing practices.

6 RADLEX

➤ Each concept consists of a unique identifier, a short name, a long name, and a definition.

RXNORM

RxNorm contains names for <u>clinical drugs</u> and <u>drug delivery</u> devices contain information <u>on ingredients</u>, <u>strengths</u>, and <u>dose form</u> (physical form in which the drug is directed).

هديل الذعبي