

# Using a Standardized Nursing Terminology for PHN Assessment Intervention Evaluation

## *PART 2*

Debra Eardley, DNP, RN, PHN  
Assistant Professor  
Metropolitan State University  
School of Nursing  
St. Paul, MN



# OBJECTIVES

1. Identify a holistic standardized nursing terminology for PHN assessment, intervention and evaluation
2. Evaluate use of a holistic standardized nursing terminology for PHN assessment, intervention and evaluation



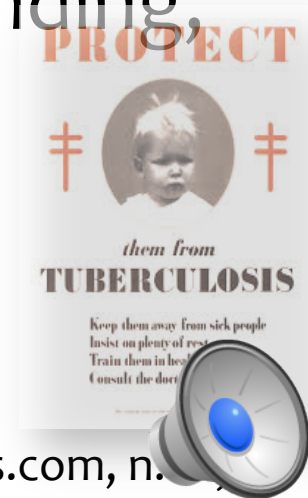
# OUTLINE

- Role of the Public Health Nurse in response to a communicable/infectious disease
- Latent Tuberculosis Infection (LTBI)
- Case Study – LTBI
  - Assessment
  - Interventions
  - Evaluation pre/post intervention
- Post case study quiz (7 questions – 7 pts)



# ROLE OF PUBLIC HEALTH NURSE

- The practice of promoting and protecting the health of populations using scientific knowledge from nursing, social and public health sciences
- PHN use evidence-based interventions for TB control
- Such as surveillance, outreach, case finding, screening and case management reduce TB rates and prevents TB from spreading



(Centers for Disease Control and Prevention, 2011; googleimages.com, n.

# WHAT IS LTBI?

- Latent TB Infection (LTBI) is the presence of *M. tuberculosis* organisms *without signs and symptoms* and a *normal* chest x-ray; is *not* active TB, but if untreated can progress to active TB
- Tuberculin skin test (TST) is used to determine presence of TB
- Induration (5 - 10mm) – swelling at the injection site is indicative of TB



# LTBI TREATMENT

CDC (2011) recommends 12 doses (3 months)  
of Isoniazid (INH) and Rifampin (RPT)

+

Direct observed therapy (DOT) is  
recommended for all LTBI cases if possible

=

Prevents onset of active TB



# DIRECT OBSERVED THERAPY (DOT)

*DOT is when health care professionals observe clients to ensure that they ingest each dose of anti-TB medication, to maximize the likelihood of completion of therapy.*



(Harkness & DeMarco, 2012; [googleimages.com](https://www.google.com/search?q=googleimages.com), n.d.)



# CASE STUDY

Hermina is a 27 year old female who was referred to the Public Health Department (PHD) by the local clinic for a positive Tuberculin Skin Test (TST) with 17mm induration. The local clinic also did a QuantiFERON (IGRA) Tuberculosis blood test, which was positive, and her chest x-ray was normal. She was prescribed Isoniazid (INH) and Rifampin (RPT) for 12 weeks (30 day supply to start) and was told to return to the clinic in 4 weeks. Hermina was skeptical about managing the LTBI treatment because she doesn't like to take any type of pill. She decides to see what the PHN can help with, and set up the first appt.



(googleimages.com, n.d.; MDH, 2012/Local PH Workgroup, 2014)





## CASE STUDY – cont.

At the first visit, the PHN asked Hermina if she knew why she was there. Hermina stated she has to take medications because she had a positive TST and blood test. They discussed details of her diagnosis and Hermina *denied* any signs/symptoms of active TB. The PHN reviewed Hermina's medication regimen and potential side effects, then got a weight. The PHN recommended direct observed therapy (DOT), weekly for 12 weeks, and to follow-up with her provider in one month. Hermina agreed to the plan of care. For the next 3 weeks, Hermina showed up for her appts. She did not exhibit any side effects and was excited to soon see her provider for lab results.



# CLINICAL SUMMARY

**The primary goal for Hermina is to complete her drug therapy**

1. Hermina was recently diagnosed with LTBI and denies any active TB symptoms.
2. Her health care provider ordered INH & RPT and referred her to the local Public Health Department for follow-up and DOT.
3. During the PHN assessment Hermina disclosed little information about her personal life.
4. The PHN recommended Hermina enroll in DOT, weekly for 12 weeks.
5. Hermina agreed to DOT as long as she could continue meeting the PHN at the local PH Department.
6. The PHN and Hermina wrote up the plan of care for DOT q week and to monitor side effects.
7. Hermina kept the first 3 appts and was anxious to see her provider week 4 for lab work. She wants to know if the drugs are helping.



# OMAHA SYSTEM CHARTING

## 1. PROBLEM: **Communicable/Infectious Condition – (LTBI)**

Signs/symptoms: (*select those that apply*)

- Infection
- Infestation
- Fever
- Biological hazards
- Positive screening/culture/laboratory results
- Inadequate supplies/equipment/policies to prevent transmission
- Does not follow infection control regimen
- Inadequate immunity
- other



# OMAHA SYSTEM CHARTING

## Step 2: PROBLEM: **Medication Regimen – (LTBI)**

Signs/symptoms: (*select those that apply*)

- Does not follow recommended dosage/schedule
- Evidence of side effect/adverse reactions
- Inadequate system for taking medications
- Improper system for taking medications
- Fails to obtain refills appropriately
- Fails to obtain immunizations
- Inadequate medication regimen
- Unable to take medications without help
- Other



# OMAHA SYSTEM CHARTING

## Step 3: Outcome Ratings: knowledge, behavior, status\*

<b>Knowledge (What the client knows)</b>	<b>Behavior (What the client does)</b>	<b>Status (How the client is)</b>
Consider knowledge of: <ul style="list-style-type: none"><li>• LTBI disease</li><li>• Treatment regimen</li><li>• Adverse side effects</li></ul>	<ul style="list-style-type: none"><li>• Follows treatment orders<ul style="list-style-type: none"><li>○ Maintains weekly DOT appts</li></ul></li></ul>	Consider: <ul style="list-style-type: none"><li>• Signs and symptoms</li><li>• Complications</li><li>• Diagnostic tests</li><li>• Medication doses completed</li></ul>

*\*Part of the Omaha System Assessment component that is used pre/post intervention (see next 3 slides)*



# OMAHA SYSTEM CHARTING

Problem Rating Scale for Outcomes: **Knowledge**, Behavior, status (KBS)

## **Knowledge** (*what the client knows*)

### 1 - **No knowledge of:**

**disease and treatment**

### 2 - **Minimal knowledge of:**

disease and treatment (Rx); is willing to learn/constant coaching needed (at weekly visits)

### 3 - **Basic knowledge of:**

disease and Rx; intermittent guidance/coaching every other visit

### 4 - **Adequate knowledge of:**

disease and RX; guidance/coaching still needed (1 x month) for disease Rx

### 5 - **Superior knowledge of:**

disease and Rx; demonstrates understanding of the significance of disease Rx adherence



# OMAHA SYSTEM CHARTING

Problem rating scale for outcomes: Knowledge, **Behavior**, status (KBS)

## **BEHAVIOR** (*what the client does*)

- 1 - **Not appropriate behavior**  
Refuses treatment plan (Rx)
- 2 - **Rarely appropriate behavior**  
Reluctantly agrees to Rx/misses 7 or > days of Rx/  
must restart Rx
- 3 - **Inconsistently appropriate behavior**  
Agrees to Rx/misses 7 days of Rx/must restart Rx/
- 4 - **Usually appropriate behavior**  
Engaged in Rx/misses < 7 days of Rx
- 5 - **Consistently appropriate behavior**  
Completes Rx plan



# OMAHA SYSTEM CHARTING

Problem rating scale for outcomes: Knowledge, Behavior, **status** (KBS)

## **STATUS** (how the client is)

### 1 - Extreme signs/symptoms

Abnormal lab results/unable to tolerate Rx due to constant, severe side effects (s/e)

### 2 - Severe signs/symptoms

Abnormal lab results, Rx s/e are severe, but intermittent and tolerating

### 3 - Moderate signs/symptoms

Rx s/e are moderate, tolerating with improving lab results

### 4 - Minimal signs/symptoms

**Rx s/e seldom occur with improving lab results**

### 5 - No signs/symptoms

Tolerated Rx without side - effects/lab results normal/no communicable/infectious disease





## CDC Guidelines

### **C/I DISEASE SCREENING**

1. LTBI Disease:
  - Positive TST and IGRA result
  - Chest x-ray normal
  - Lack of physical findings or symptoms indicating active TB

## OMAHA SYSTEM CHARTING

### **PROBLEM: C/I CONDITION – LTBI**

1. Surveillance – Signs and symptoms – physical: evidence of disease/infection

(CDC, 2011; Martin, 2005; MDH, 2012/Local PHN Workgroup, 2014)



## CDC Guidelines

### **LTBI MEDICATION REGIMEN**

1. Drug therapy: INH + RPT weekly x 12 weeks administered by Directly Observed Therapy (DOT)
2. Teach client to watch and report drug therapy side effects:
  - Fever
  - Unexplained anorexia
  - Dark urine (coffee color)
  - Icterus
  - Rash
  - Persistent paresthesia of hands/feet
  - Abdominal tenderness
  - Easy bruising or bleeding
  - Nausea/vomiting
  - If any symptoms occur, see health care provider

## OMAHA SYSTEM CHARTING

### **PROBLEM: MEDICATION REGIMEN - LTBI**

1. Surveillance – medication administration
  - Direct observed therapy – 12 week regimen (weekly visits)
2. Teaching, guidance and counseling – medication action/side effects
  - Important to take medications as prescribed/purposes/benefits
  - Changes to note and report in a timely manner
  - Need for timely lab tests/results
  - Other

(CDC, 2011; Martin, 2005; MDH Om.  
System DP & C Group, 2013)



EHR DASHBOARD

# OMAHA SYSTEM CHARTING

Service Details | **Charting** | Vitals

Charting TB Screening on June 3, 2014 New Problem +

Pathways:

LTBI

Communicable/infe... | Medication regimen

Communicable/infectious con...

Priority:

Severity:

Scope:

Signs & Symptoms:

Knowledge:

Behavior:

Status:

Identified:

Closed:

Problem

Notes:

**Assess (Surv)** New Intervention +

**signs/symptoms-physical**

- evidence of disease/infection
- monitor weight

**Perform (T&P)** New Intervention +

**specimen collection**

- blood
- order appropriate labs (for facilities with in-house lab)

**Teach (TGC)** New Intervention +

**signs/symptoms-physical**

- completion of treatment instructions (includes symptom recognition, decline future TSTs)

**screening procedures**

- interpretation of blood tests
- interpretation of tuberculin skin tests
- interpretation of x-rays

**anatomy/physiology**

- disease process

**Manage (CMgt)** New Intervention +

**continuity of care**

- coordination among providers
- schedule/provide services

**community outreach worker services**

- supervise



EHR DASHBOARD

# OMAHA SYSTEM CHARTING

Service Details | **Charting** | Vitals

Charting *TB Screening* on June 3, 2014 New Problem +

Pathways:   
LTBI

Communicable/Info... | **Medication regimen**

**Medication regimen Details**

Priority:
Severity:
Scope:
Signs & Symptoms:
Knowledge:
Behavior:
Status:
Identified:
Closed:
Problem
Notes:

**Assess (Surv)** New Intervention +

**medication administration**

- takes medications as prescribed/recommended

**medication action/side effects**

- notes and reports changes/side effects in timely manner
- refill assessment
- takes as prescribed
- weekly/monthly nurse assessment for 12 week DOT therapy

**laboratory findings**

- liver function

**Perform (T&P)** New Intervention +

**medication administration**

- directly observed therapy - 12 week regimen

**specimen collection**

- blood

**Teach (TGC)** New Intervention +

**medication action/side effects**

- changes to note and report in a timely manner
- important to take as prescribed
- need for timely laboratory tests
- purpose/benefits

**Manage (CMgt)** New Intervention +

**medication coordination/ordering**

- communicate with pharmacist/other providers
- monitor supply
- obtain refills in a timely manner



# OMAHA SYSTEM CHARTING

## Visit Report

**Client** 357745 LTBI, Client

**Visit date** 06/03/2014

### Visit

#### Service Details

Start time: 09:00 AM  
End time: 10:00 AM  
Service: TB Screening  
Employee: Norahs New, Sandbox Admin  
Service summary: *screening completed*  
*Plan:*  
1. *f/u with x-ray results*  
2. *f/u visit scheduled in 1 week*

Identified: 06/03/2014  
Problem notes: *awaiting xray results*

### Vitals

#### General

Blood pressure: 138/83  
Temperature: 98.2  
Pulse: 14  
Respiration rate: 15  
Adult height: 70.0  
inches:  
Adult weight lbs: 155.0  
Adult body mass index: 22.2  
Lung Sounds  
Left: Clear  
Right: Clear

#### Pregnancy

#### Post-Partum

#### Child

#### Pain Assessment

### Files

### Pathways

LTBI

### Problems

#### Communicable/infectious condition

Priority: High  
Severity: Potential  
Scope: Community  
Knowledge: 1 - No knowledge  
Behavior: 1 - Not appropriate  
Status: 5 - No signs/symptoms  
Identified: 06/03/2014

### Interventions

#### Assess (Surv)

signs/symptoms-physical  
evidence of disease/infection  
Notes: *screening completed; no evidence of active disease*

#### Teach (TGC)

signs/symptoms-physical  
completion of treatment instructions  
(includes symptom recognition, decline future TSTs)

#### screening procedures

interpretation of tuberculin skin tests

#### anatomy/physiology

disease process

#### Manage (CMgt)

#### screening procedures

chest x-ray

#### continuity of care

schedule/provide services

Notes: *f/u visit to review xray results*

### Problems Not Addressed At This Time

#### Medication regimen

Priority: Low  
Severity: Potential  
Scope: Individual

Sign and date: \_\_\_\_\_

**VISIT REPORT: HARD COPY**



# POST QUIZ

1. Take the post case study quiz (7 questions)
  - a) Post case study quiz can be found on D2L
2. When completed, upload your quiz in dropbox



# REFERENCES

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