Managing Complex Cases

Centre universitaire de santé McGill

McGill University Health Centre

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Disclosures

- No conflicts of interest to disclose

Outline

- Learning Objectives
- Context of our TB clinic in Montreal, Canada
- Case study

Learning Objectives

- Recognize the importance of individualized patient care in the case management of MDR TB patients

- Identify case management activities that support patients who are experiencing side effects associated with MDR TB drug regimens.

The Montreal Chest Institute (founded 1909)

Future site (June 2015)

Partnership (WHO,Health Canada)(Family/informal)

•Public Health/Immigration

•Patient and family (McGill model)

•Community health services

•Nunavik Health Services

•Dietician

• Pulmonologist

• HIV clinic

•Respiratory therapist

•Epidemiologist

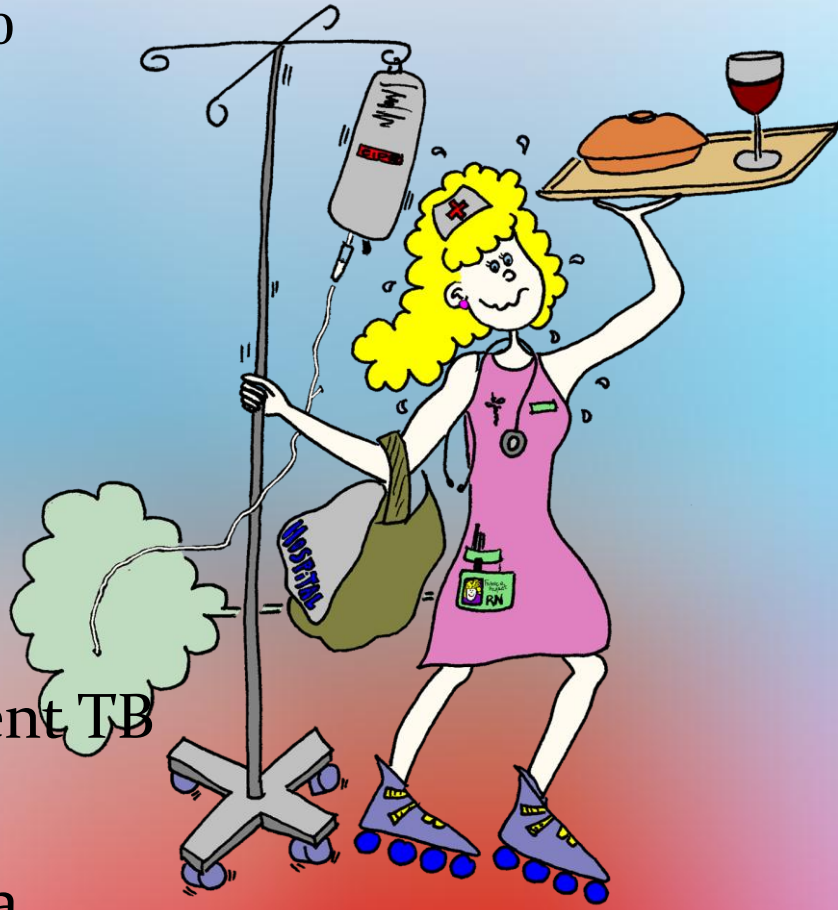
•Occupational therapist

•Physiotherapist

•Social Worker

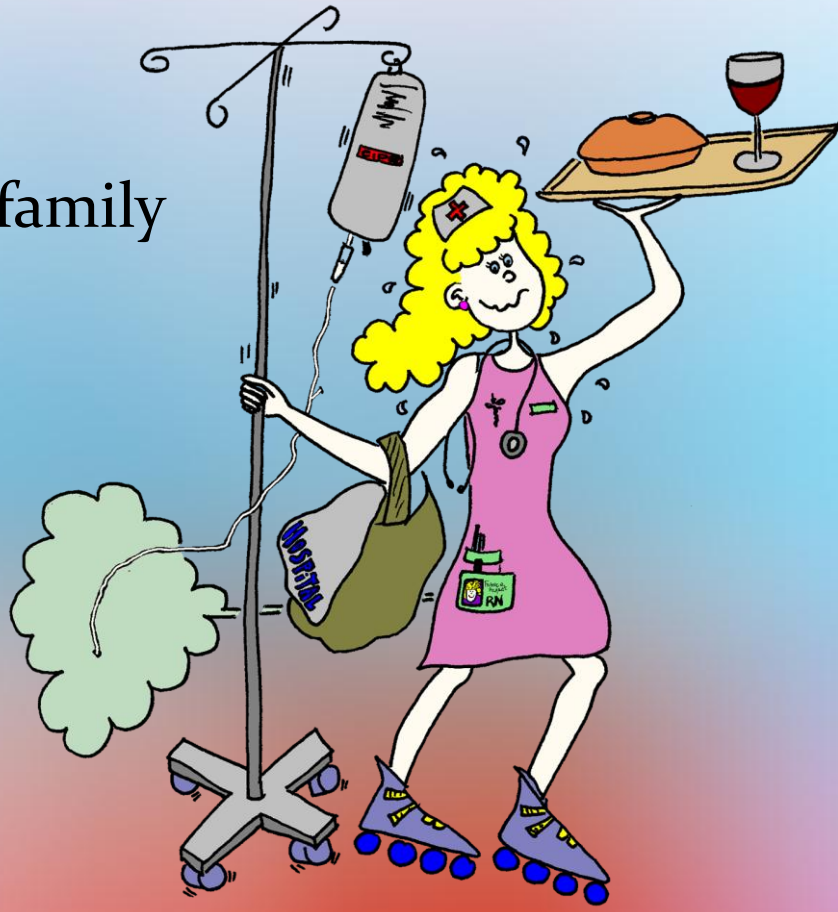
Nurse Case Manager Objectives

- Treatment adherence 100%
- Prevent transmission
  - Treating contacts
- Health promotion
  - Assess re smoking cessation
  - HIV screening
- Each year: 10,000 visits
  - 750 patients treated for Latent TB
  - 50-100 Active TB
  - 50-100 Non TB mycobacteria
- 2.5 FTE nurses



Nursing Case Manager interventions

- Interviews with patient and family
- Home visits (5)
- Multi disciplinary
- Review medical file
- Review CXR
- Microbiology results



- Develop a collaborative nursing practice. Transparent, trustworthy, equal interest, identify strengths, non-judgmental

Case study: A success story (?)

- It is a great pleasure to prepare and present a success story and our scientifically proven to be successful interventions. Through team work, we have come up with brilliant ideas…
- Well, not all the time. I am very humbled to present to you one of our most challenging cases, sometimes not so successful

Question

- What happens when we are not able to develop a collaborative nursing relationship?

Denise : Delay in diagnosis

- 43 y.o. female from Eastern Europe
- First seen in April 2012 at a GP clinic: chronic cough, CXR was done. LUL pneumonia.
- Developed allergic reaction to antibiotic, stopped and felt better.
- October 2012 seen again.
- December 2012: same clinic, CXR done again and Clavulin prescribed for pneumonia.
- January 15th 2013: CXR LUL cavities. Referred to TB clinic that day
- Estimated total waiting time in busy waiting rooms : 12 hours!
- Was seen by 4 different MD's.

Cough and weight loss

- When seen in TB clinic on Jan 15,2013, she continued to complain of chronic cough and weight loss (5 lbs).
- It was her 5th medical consultation since April 2012. All other consultants diagnosed pneumonia.
- CXR review demontrated a LUL infiltrate back in April and now shows LUL cavitaties.
- She lives with ex-boy friend and his 6 y.o. child
- She is a full time student.
- The doctor worries about adherence to isolation and possibility of MDR TB with transmission

Go!

- Denise was hospitalized in a isolation room and prescribed 3 sputum inductions, then TB meds
- Because Denise is from a TB endemic area
- Because 50% of active TB cases are INH resistant in that area
- Initial treatment: INH, RIF, EMB, PZA, Moxifloxacin and IV Amikacin (6 drug Rx).
- Should we expect Denise to be happy?

GI problem leading to…

- With TB treatment. Denise experienced headaches, lost of appetite, nausea, vomiting, diarrhea, taste alteration.
- Hospital food is “bad.”
- Gravol refused: too much medication
- Diarrhea, vomiting not observed only subjective.
- She eats when ex-boy friend brings food.
- At that time Denise is labeled “difficult” and TB nurse clinician is rushed in.

TB team evaluation requested

- At this point AFB 3+
- Patient questioning the diagnosis, believes it's pneumonia.
- Denise's mother : MD in Eastern Europe (cultural belief/experiences)
- Constraining beliefs regarding TB treatment and the government health care system
- Not allowed to leave hospital on pass, feels she's in jail and can't exercise.
- Resourceful, autonomous, but has low social support (internet)
- Has no secure income, but has a web page contract. She can work on it, in hospital, but the negative pressure ventilation is very noisy.
- She is missing important final exams for a course

TB team interventions

- Team meeting to help treating team understand the diagnosis. Showed CXR, review microbiology preliminary results.
- Allowed patient to express her feelings. Language barrier noticed (but she was insulted when interpreter showed up at next visit).
- Offered to have her use patient kitchen for cooking.
- Rapidly introduced Social Worker to follow-up on financial and other social issues (letter for school).
- MD supplied her money once, because she complained of not being able to afford food…She bought a flower with it…not an edible one.
- Eating disorder? Mental Health?

Diagnostic of XDR TB (Feb 13, 2014)

- Patient interpretation: medical error.
- Ex-boy friend involved and wants to take legal action.
- Drug regimen changed to PAS, Linezolide, Macrolide, Ethionamide, Cycloserine, Imipenem
- Major side effects to new treatment: loss of appetite, nausea, vomiting, diarrhea, weakness, fecal incontinence (observed) abdominal cramps, peripheral neuropathy.
- Patient feels “she’s like a guinea pig.”

Drug sensitivity (example only)

Rapport d'analyse

Requête #: XXXXXXXXX 04A62900008

Bénéficiaire

Antibiogramme pour le résultat 1 *Mycobacterium tuberculosis*

TECHNIQUE UTILISÉE	ANTIBIOTIQUE	VALEUR	INTERPRÉTATION
Méthode des proportions (Bactec)	Isoniazide	0.1 mg/L	Résistante
	Isoniazide (0.4)	0.4 mg/L	Sensible
	Rifampicine	2 mg/L	Résistante
	Éthambutol	2.5 mg/L	Sensible
	Streptomycine	2 mg/L	Résistante
	Streptomycine 6,0	6 mg/L	Résistante
	Éthionamide	1.25 mg/L	Modérément sensible
	Kanamycine	5 mg/L	Sensible
	Capréomycine	1.25 mg/L	Sensible
	Ofloxacine (2)	2 mg/L	Sensible
	Rifabutine	0.5 mg/L	Résistante
	Acide P-aminosalicylique	2 mg/L	Modérément sensible
Dilution en bouillon (CMI-Bactec)	Pyrazinamide	<=100 mg/L	Sensible

Meanwhile

- After 6 months of hospitalization: Transferred to day hospital. cultures confirmed negative and CXR improved
- Weight loss: Initially 56kg (123lbs), now 40kg (88lbs) after 6 month of hospitalisation
- Probable central and confirmed peripheral neuropathy
- Patient denied Multiple Sclerosis diagnosis made in 2007
- Visual impairment MS vs medication side effects
- Lack of trust (no trust in the medical-nursing team), protects her privacy, refuses home care and home visits
- On going questioning diagnosis
- Major change medically from pneumonia to MDR to XDR-TB and MS
- Patient reaction not predictable, often opposed to intervention.
- Psychiatric evaluation shows no psychiatric disease

Can't stop: Transferred to Day Hospital

- Close F/U to make sure Denise takes her meds and gains weight.
- Dobhoff (nasoduodenal) tube placed to meet caloric needs as a condition to transfer to day hospital, with daily gavage feeds while there
  - Weight stabilizes at 38Kg.
- Consult neurology and ophthalmology:
  - Refused most evaluation. Re-booked x 4 for initial neurologist evaluation.
- No clarification re symptoms of MS vs drug effects

Discharge from day hospital

- Arriving later and later at day hospital.
- Unable to meet caloric needs, because of her late arrival
- Suggested home care for DOT…Patient refused home care. Requesting self-medication
- Most intra-hospital medical and nursing plans failed or patient refused
- Stays in close contact with social worker (never involved in her health decisions)

Discharged home

- After 8 months, at 38kg, Denise is discharged home from day hospital.
- Signed contract with medical team.
- Community pharmacy gives meds 2x per day

- After 12 months Denise is smiling and weighs 53kg
- Visual field and retina exam better
- MD very flexible.
- Patient remains in contact with social worker
- Patient denies MS and tuberculosis

What do we understand?

- Sometime TB is SUFFERING
- We can only offer Denise the services that she wants to have.
- She accepted financial help.
- She accepted community transport to her visits.
- After 13 months of treatment…

My conclusions

- Engaging patient in therapeutic relationship is the key.
- Home visits helped a lot
- Team approach better
- Regular and planned visits can help if not overwhelming
- Facilitate transport to medical appointments when no collaboration from patient
- Court order as last resort