# Palliative Care for Patients with Motor Neurone Disease through Multi-specialties Collaboration

Dr. CHEN Wai-Tsan Tracy

Palliative Medicine Specialist

Associate Consultant

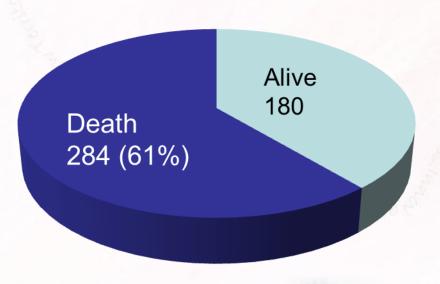
Department of Medicine & Geriatrics,

Tuen Mun Hospital

HA Convention 2015 18<sup>th</sup> May 2015

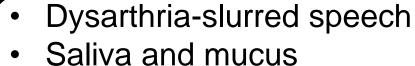
## **HA Statistics**

- Diagnosis: ICD9 with 335.20 (Motor Neurone Disease or Amyotrophic Lateral Sclerosis)
- CDARS of Hospital Authority
- Period: 1/4/2011 to 31/3/2015 (in-patient & out-patient)



- Total 464
- Mean age (yr): 62.2 (20-92)
- M:F = 1.75 : 1.0
- 284 deaths (61%), average
   71 deaths/ year
- 180 alive

- Fatigue
- Progressive muscle weakness & wasting
- Loss of weight
- Fasciculation, cramp and spasticity



problems

Dysphagia (paralysis of bulbar muscles)



Respiratory muscle weakness

### Course of Disease

- Every person develops the disease in a different way with variable onset & progression
- Symptoms experienced depends on the area of nervous system affected
- Always progressive with no remissions
- Respiratory failure is main cause of death



# Prognosis

- Average survival 2-5 years from onset
- Poor prognosis associated with
  - older age at presentation
  - bulbar onset
  - early involvement of respiratory muscles
  - malnutrition
  - development of hypermetabolic state



# Experience of MND Patient

"我覺得我患這個病比患癌症更慘,癌症都有治療,做唔到手術都可以試下電療、化療、和標 輕藥... 但係我這個病係無得醫、無得控制的!"

I think this disease is worse than cancer. There are various treatment options for cancer, like operation, radiotherapy, chemotherapy, and targeted therapy.

However, MND has no cure, no control!



#### Psychosocial Impact

Depression (up to 30-50%)

#### Compared with cancer, MND has

- More demoralization
- More hopelessness
- More suicidal ideation

Clarke DM, McLeod JE, Smith GC, Trauer T, Kissane DW. A comparison of psychosocial & physical functioning in patients with motor neurone disease and metastatic cancer. J Palliative Care. 2005; 21(3): 173-179

# Undesirable consequences...







#### CONCISE GUIDANCE TO GOOD PRACTICE

A series of evidence-based guidelines for clinical management

NUMBER 10

Long-term neurological conditions: management at the interface between neurology, rehabilitation and palliative care

NATIONAL GUIDELINES

March 2008



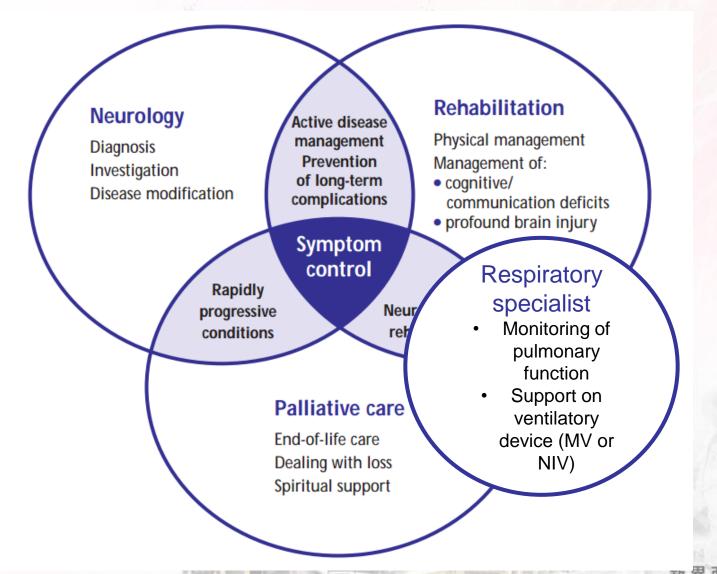
THE NATIONAL COUNCIL FOR PALLIATIVE CARE



Interface between neurology, rehabilitation & palliative care is recommended to address the diagnostic, restorative & palliative phases of LTNCs.



#### The Interface & the Role



## TMH Multi-specialties Collaboration

- MND taskforce formed in mid 2013
- 41 patients dx MND (4/2013 3/2015)

- 41 cases
- 2 died in as inpatient on presentation
- 3 followed up by other clusters
- 5 working on diagnosis

Neurology

#### Rehabilitation

- 35 cases
- 4 are functionally good

Respirology

• 31 cases

Palliative care



#### Rehabilitation

#### Respirology +/- GI

- Diagnosis
- Counselling for disease trajectory & prognosis
- Treatment: Riluzole

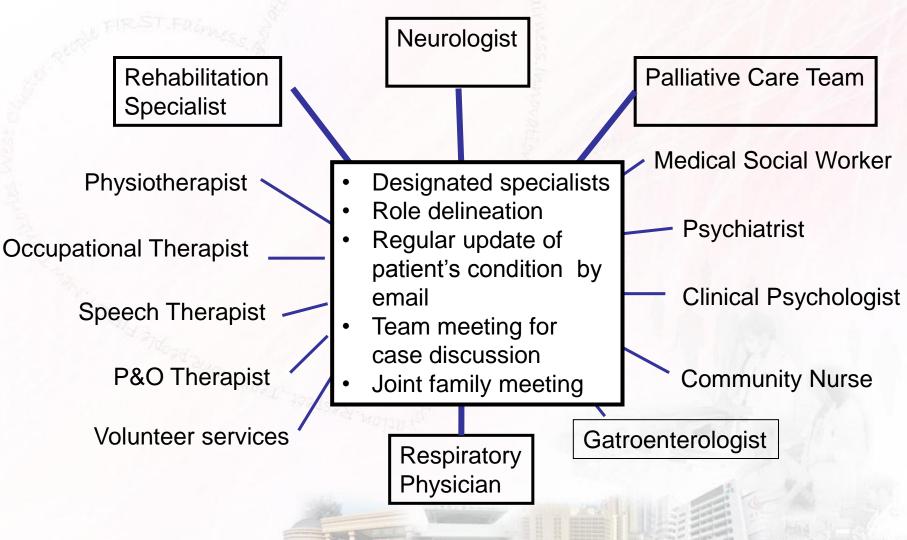
Neurology

- Functional evaluation (ALSFRS-R)
- Determine goals of rehab & optimize function
- Baseline lung function & interval monitoring
- Coordinate for PEG

- Evaluate & facilitate disease acceptance
- Management of distressing symptoms
- Support for EOL decisions & Advance Care Planning
- Bereavement counselling

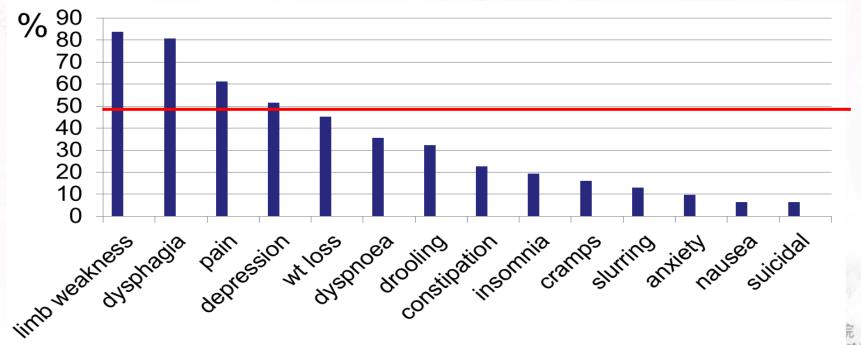
Palliative care

# TMH Multi-specialties Collaboration

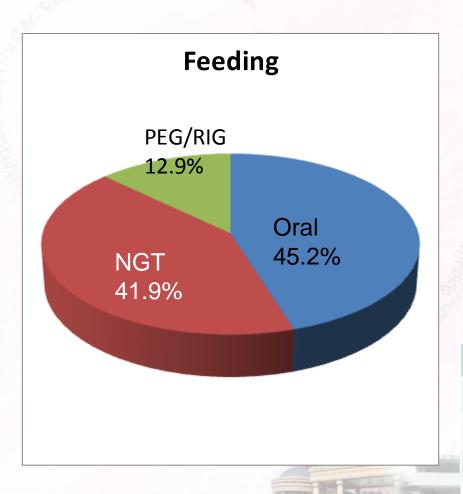


#### Patient characteristics & symptom prevalence

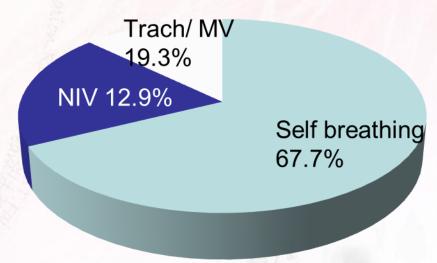
Mean age (year)	58.5 (33-98)
M:F	1.6 : 1
Bulbar onset	4 (12.9%)
Symptom onset to diagnosis (months)	4
Diagnosis to PC service (months)	6.5
Average number of symptom	4.8



# Specific Interventions



#### **Respiratory support**

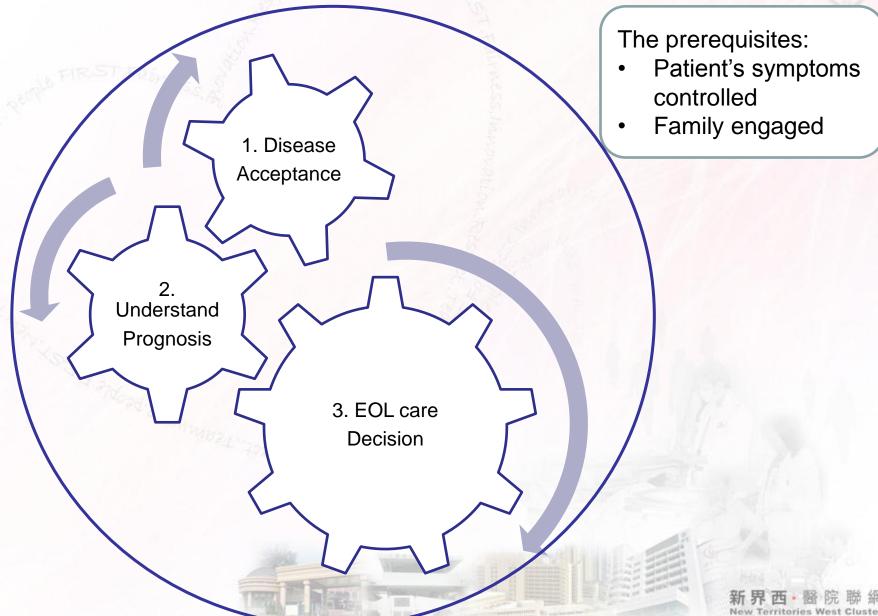


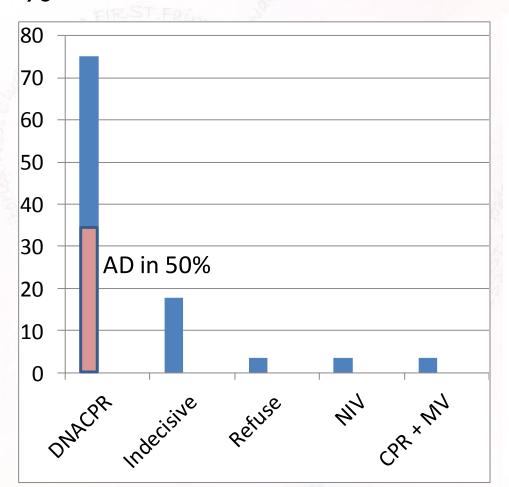
Mode	Total	Died
MV	4	3
NIV	6	5
Self breathing	21	8

<sup>\*</sup> Fifty percent died with NIV/MV

新界西 醫院聯網

ACP Process





- Mentally competent = 28
  - DNACPR = 21 (75%)
    - 50% signed AD, the other opted for CMS documentation
    - 1 opt for NIV & no CPR
  - Indecisive = 5 (17.6%)
  - Refuse = 1 (3.6%)
  - CPR + MV = 1 (3.6%)
- MIP = 3

## Survival

Number of death = 16 (51.6%)	<b>Duration (days)</b>
Diagnosis to death (overall)	277 (9.2 months) *
Bulbar onset (PBP n=3) vs ALS	82 vs 322
Average duration under PC	118

<sup>\*</sup> Duration is under-estimated as some patients enrolled still survive.

	Multi-specialties Collaboration (n=16)	Pre-collaboration (2011-2013 n=38)
CPR	0	6 (15.8%)
Family dissatisfaction (Coroner/ complaint)	0	2 (5.3%)

All patients died with a plan honouring their wish.



## Mr. Chan M/61

- Presented to surgical for abdominal pain and weight loss. Negative workup.
- Confirm diagnosis of MND by Neurologist.
- Deteriorated & defaulted all the appointments
- Palliative Home Care phone contact:
  - Depressed with suicidal thoughts
  - Wife crying over the phone
- Palliative home visit with doctor



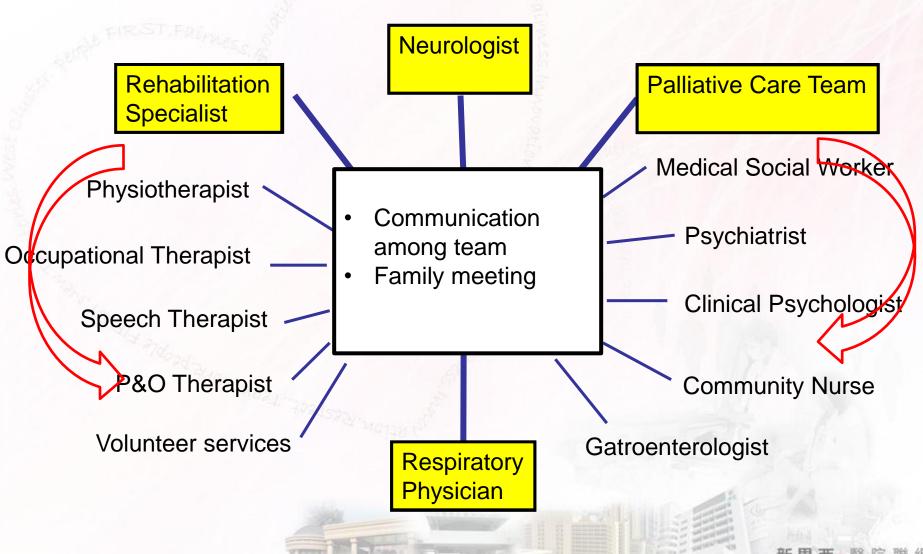
## Mr. Chan

#### Living environment:

- Rented flat with 1 bedroom
- Patient slept on sofa in living room, could not enter bedroom due to deteriorated mobility
- Problems:
  - Cachexic: BW 62→ 43.5kg
  - Pain: over limbs & bony prominence. NRS 7/10.
  - Swallowing problem: occasional choking
  - Depression: insomnia, sense of hopelessness & worthlessness, suicidal idea



# Multi-disciplinary Approach

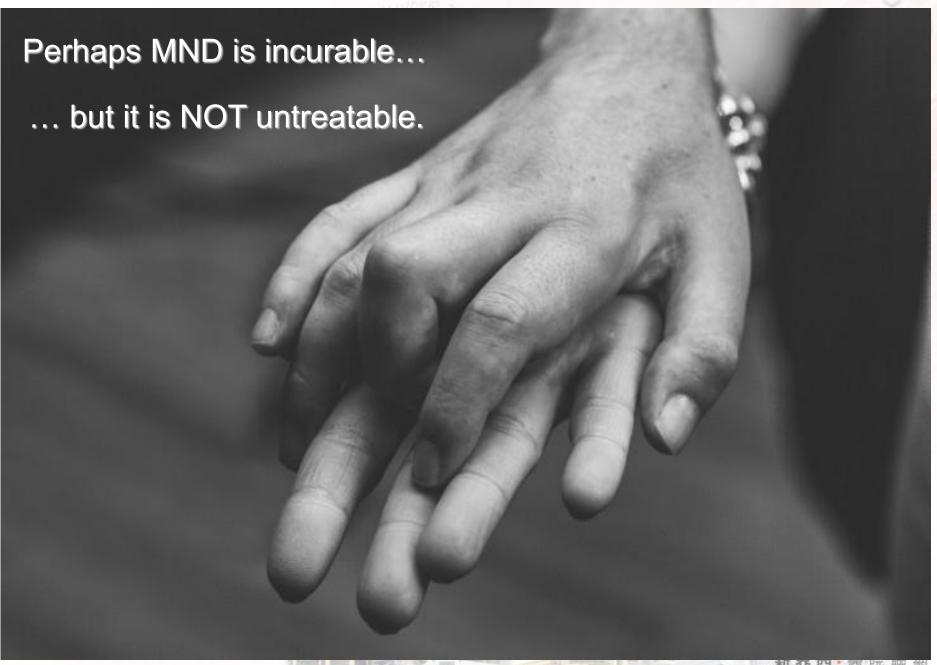


## Mr. Chan

- Management:
  - PC nurse: active listening, life reivew
  - MSW: sort out financial issues, refer volunteer group.
  - Start anti-depressant, analgesic
  - Refer OT for home visit
  - Rebook all defaulted appointments with NEATS arrangement
  - Refer psy for patient and wife
- Subsequent PC clinic FU. ACP discussed. Refused NIV/intubation and CPR. Patient passed away in 12/2014 due to respiratory failure with DNACPR in place.



建了了一个Chan 等户,写表,中東 你的是为的油 配個病然你吐电未来最



# Acknowledgement

- Dr. CK Mok (COS, M&G, TMH)
- Dr. Eddie Chow (Con, Rehabilitation)
- Dr. Eric Chan (Neurology)
- Dr. Savio Lee (Rehabilitation)
- Dr. YF Hong (Respirology)
- Rehab, Resp, Neurology & Palliative Home Care nurses
- TMH PT Department (Ms Amanda Ching)
- TMH OT Department (Ms Joyce Cheung)