MANAGING CHRONIC DISEASES: MALAYSIAN EXPERIENCE

Presentation outline

- Magnitude of chronic diseases
- Practice gap in management of chronic diseases
- Managing chronic diseases during pandemic: Malaysian experience.
- What are the roles of healthcare professionals?
- The way forward: system-based approach (WISE model)

Definition of Chronic Disease

- Health problems that require ongoing management and long-term care over a period of years include:

✓ Non communicable disease – Cardiovascular disease, HPT, DM, cancer, etc.

✓ Long term mental disorders- depression and schizophrenia

✓ Ongoing impairment- amputation, blindness, joint disorders, autoimmune disorders

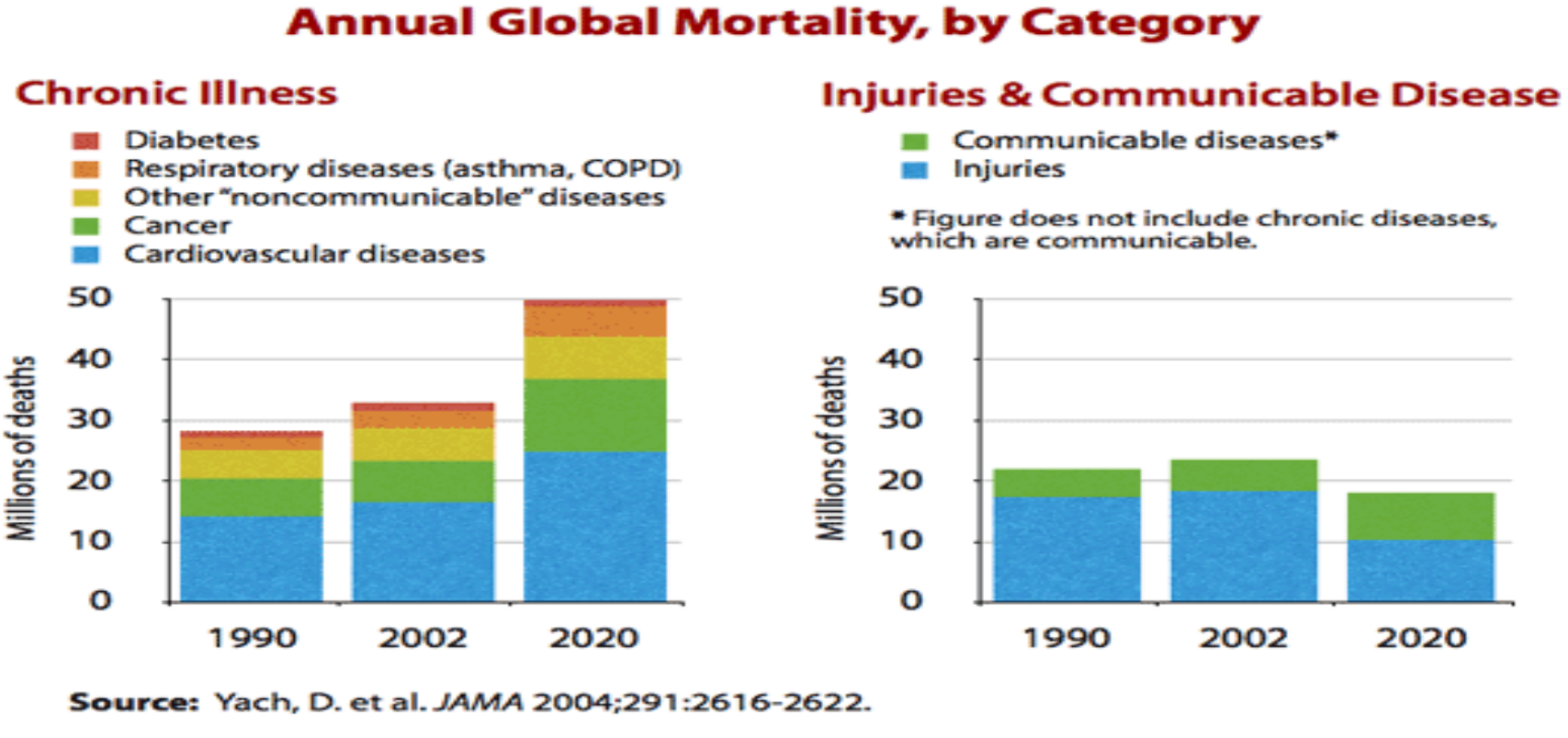
✓ Certain communicable diseases , e.g. TB, HIV/AIDS

Magnitude of Chronic Diseases

- Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 71% of all deaths globally.
- Each year, more than 15 million people die from a NCD between the ages of 30 and 69 years; 85% of these "premature" deaths occur in low- and middle-income countries.
- 77% of all NCD deaths are in low- and middle-income countries.
- Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.3 million), respiratory diseases (4.1 million), and diabetes (1.5 million).

(World Health Organisation, 2021)

Magnitude of Chronic Diseases



CHRONIC DISEASE BURDEN IN MALAYSIA

DEPARTMENT OF STATISTICS MALAYSIA

STATISTICS ON CAUSES OF DEATH, MALAYSIA, 2020

5 Principal Causes of Death 2019

- #1 Ischaemic heart diseases 15.0%
- #2 Pneumonia 12.2%
- #3 Cerebrovascular diseases 8.0%
- #4 Transport accidents 3.8%
- #5 Malignant Neoplasm of trachea, bronchus and lung 2.4%

Ischaemic heart diseases

Total 16,325

11,330 (69.4%)

4,995 (30.6%)

The principal causes of death by age group

0-14 years	15-40 years	41-59 years	60 years and over
3.3%	20.6%	18.0%	16.0%
Transport accidents	Transport accidents	Ischaemic heart diseases	Ischaemic heart diseases

The principal causes of death by ethnic groups

- Bumiputera 14.5% Ischaemic heart diseases
- Chinese 14.0% Ischaemic heart diseases
- Indians 20.4% Ischaemic heart diseases

The principal causes of maternal death

Postpartum haemorrhage 17.5%

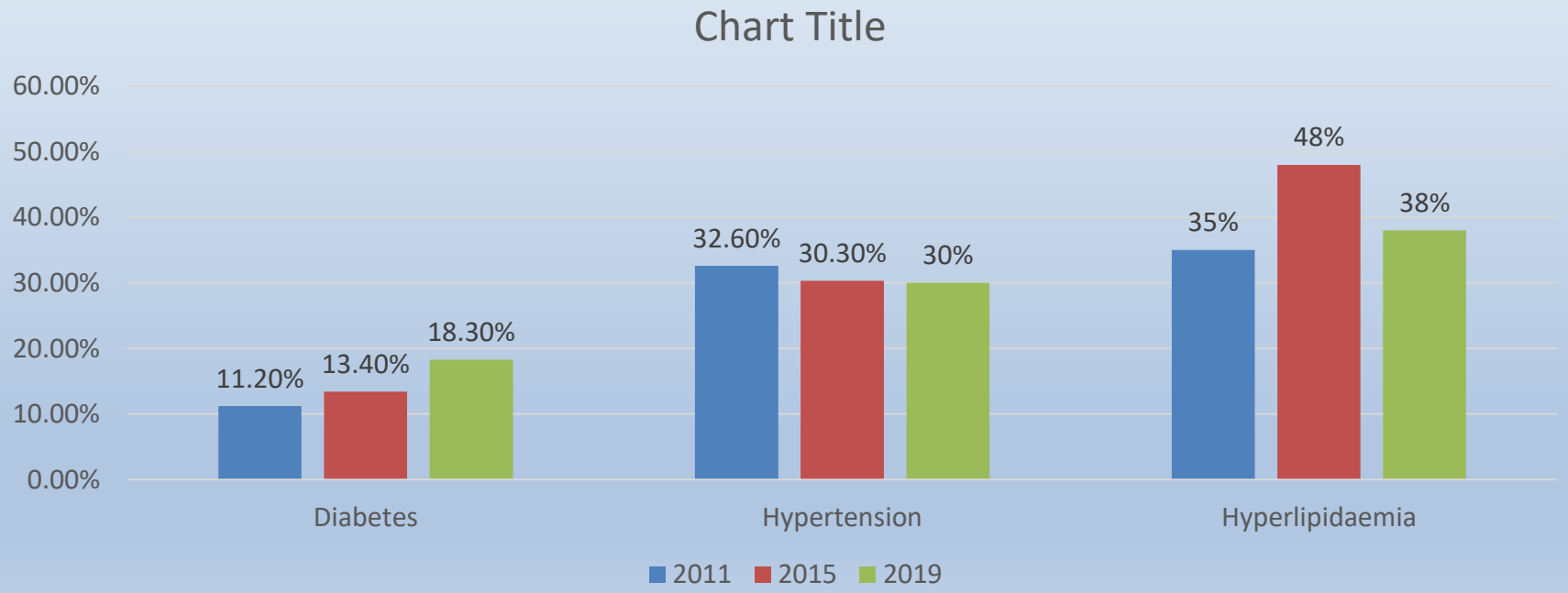
Scan the QR code to see interesting info

https://bppd-dosm.netlify.app/

Note: The analysis is based on medically certified causes of death

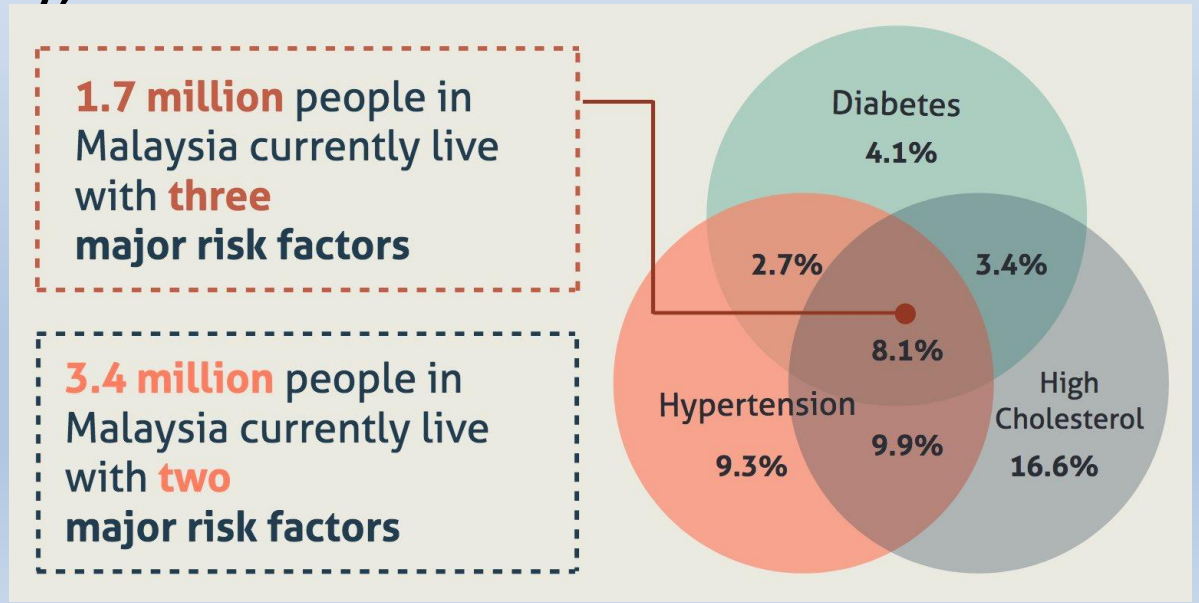
Source: Statistics on Causes of Death, Malaysia, 2020
Department of Statistics Malaysia

Prevalence of chronic diseases in Malaysia: National Health and Morbidity Survey (NHMS)



Burden of Hypertension, Diabetes & Hyperlipidemias in Malaysia

- National Health and Morbidity Survey, 2019



National Health and Morbidity Survey 2019 — Key Findings

19 Overweight/obesity & abdominal obesity: A tag team of health risk

1 in 2 adults in Malaysia were **overweight or obese**

OVERWEIGHT = Body mass index (BMI) more than 25 kg/m²
OBESE = Body mass index (BMI) more than 30 kg/m²

This was found to be highest among:

Females 54.7%

Indian ethnicity 63.9%

55-59 years old age group 60.9%

1 in 2 adults in Malaysia had **abdominal obesity**

ABDOMINAL OBESITY = Waist circumference (WC) ≥90cm for men ≥80cm for women

This was found to be highest among:

Females 64.8%

Indian ethnicity 68.3%

60-64 years old age group 71.5%

Major diseases associated with overweight/obesity and abdominal obesity

Diabetes | High Blood Pressure | Heart Disease

What can you do to reduce your risk?

Eat a healthy diet | Be physically active | Don't drink alcohol | Stop smoking | Manage stress well

www.iku.gov.my/nhms — NHMS 2019

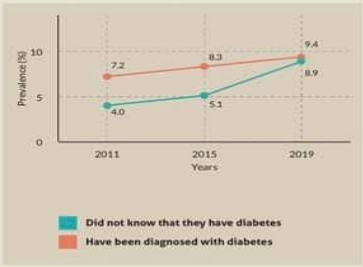
National Health and Morbidity Survey 2019 — Key Findings

04 Diabetes in Malaysia

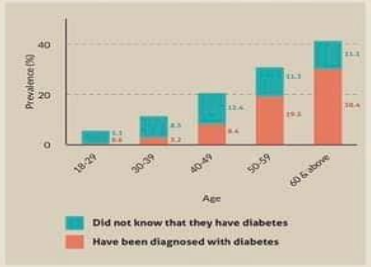
1 in 5 adults in Malaysia have diabetes

That's about **3.9 million** people aged 18 years and above

Diabetes trend 2011 - 2019



Prevalence of diabetes by age groups

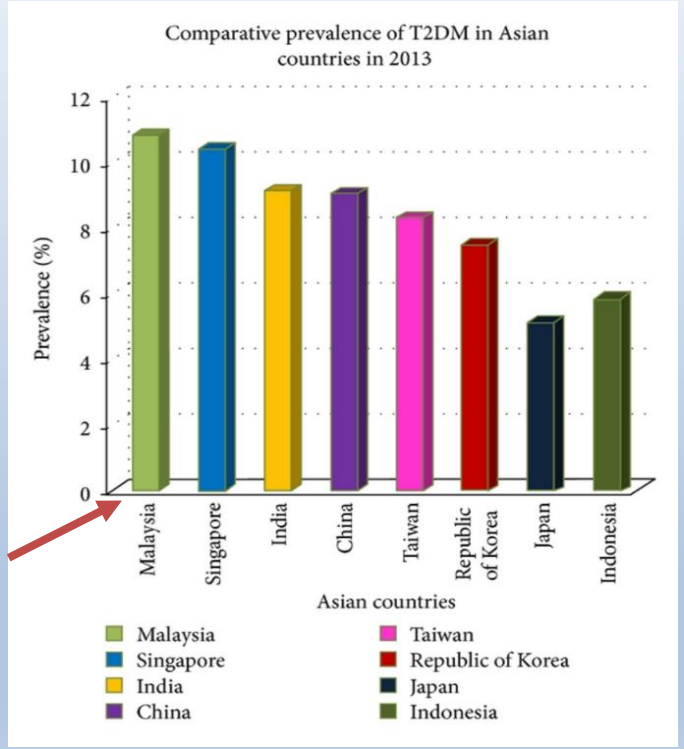


Prevalence of diabetes across states; the highest prevalence was found in these states:

*using a cut-off of 7.0 mmol/L for fasting blood sugar level

www.iku.gov.my/nhms — NHMS 2019

Comparative prevalence of diabetes in Asian countries



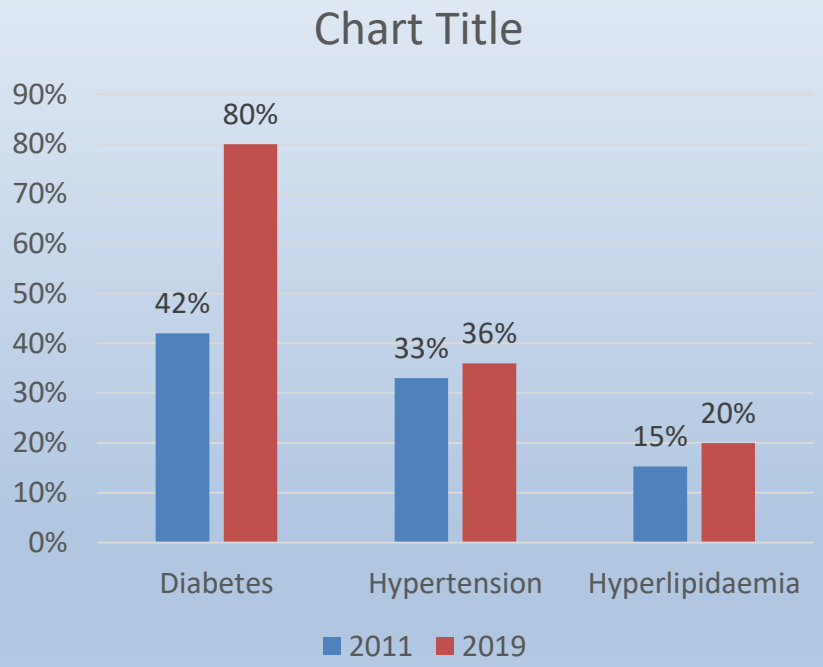
- Malaysia tops the world in diabetic nephropathy needing dialysis. In 2019, more than 35,000 patients require dialysis due to diabetes nephropathy

  (Ismail et al., 2019)
- 9% of diabetes patients have been diagnosed with retinopathy which would lead to blindness.

  (Nur Fariza et al., 2020)
- More than 50% of patients with diabetes in Malaysia experiencing peripheral diabetic neuropathy and 7% have their limb amputated.

  (Nazri et al., 2015)

Patients' awareness on risk of chronic disease complications



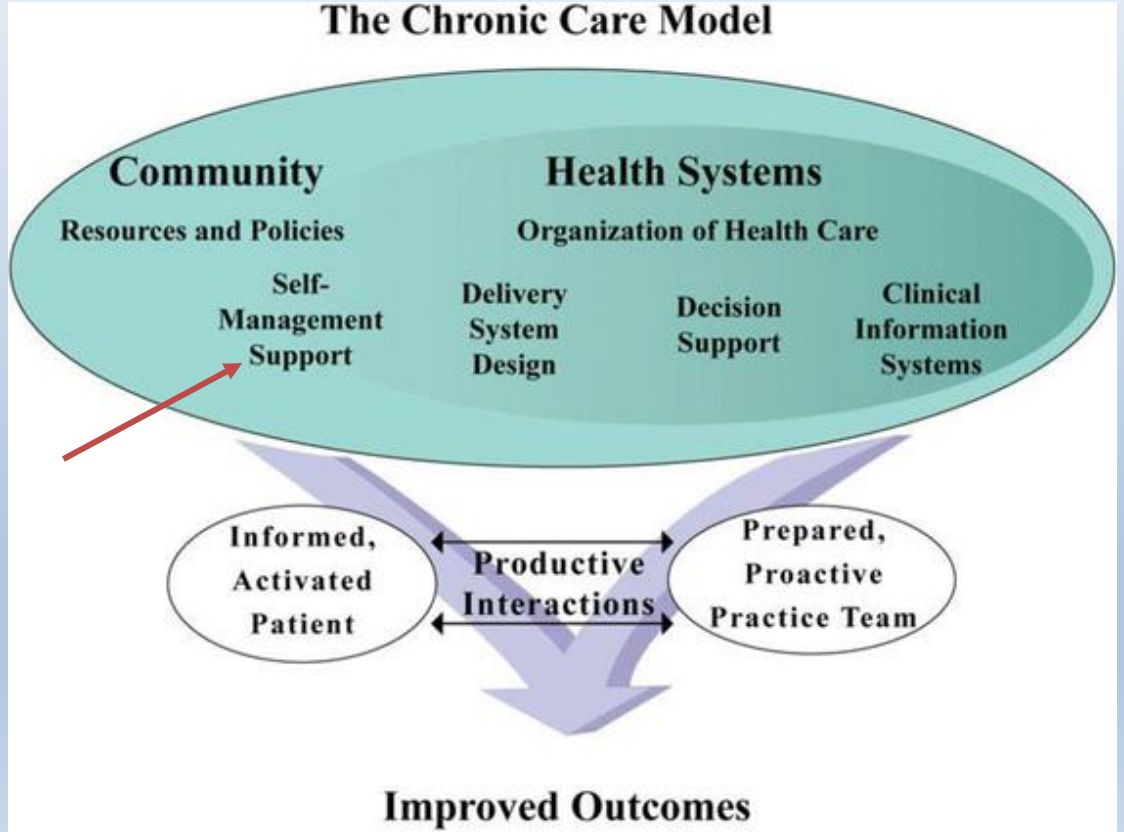
Why so ??

- Do doctors or other HCP talk to patients?
- Do patients given chance to ask doctors or other HCP?
- Do the patients being asked about their understanding?

Health seeking behaviour among patients with chronic diseases (NHMS,2019)

The Chronic Care Model

(Wagner 2002)



Six elements of Chronic Care Model

#	Elements	Explanation
1.	Health care organization	Goals, values & incentive to care providers must be aligned with payers & Ministry of Health
2.	Community resources & policies	Patients & care providers need linkages with community resources like home care, patient education, exercise program, support groups.
3.	Self management support	Enhance patient's self-management capacity; including acceptance of responsibility for self-care, the self-confidence and know-how (*knowledge, skills & tools*) required; build quality relationship & communication
4.	Delivery system	Multi-disciplinary practice team with clear division of labour; planned management and visits
5.	Decision support	Evidence based clinical practice; working to protocol, practice oversight and access to specialist expertise
6.	Clinical information system	Computerized system to remind & prompt actions; to support shared care among multiple professionals, to feedback to providers, and to track progress

What has been done?: Translating chronic care model in improving the healthcare system

- Community Based Multiple Risk Factors Intervention Strategy (CORFIS) – 2007
- 'Reviewed approach' on service delivery of primary health care system - 2007
- NCD Prevention 1Malaysia (NCDP-1M) – 2010

Gap in the practice of chronic disease management within Malaysian Health Care System pertinent to self-management

- Patients have good knowledge and awareness about the risk and complications of some of chronic diseases i.e. diabetes. However, as the life of the patients highly bound by their culture, environment and complexities of disease, support provided by the health care system often does not meet the needs and expectations of the patients; which influences the engagement of patients with disease management plan and self-care.

- Management of chronic disease and the concept of empowerment and self-management has become of great concern within the healthcare system. However, support provision for chronic disease patients are limited as service delivery revolves around the traditional medical model which focusing on acute episodic care with a lack of evidence-based practice.

- Fragmented and uncoordinated healthcare system between primary, secondary and tertiary care in managing chronic diseases.

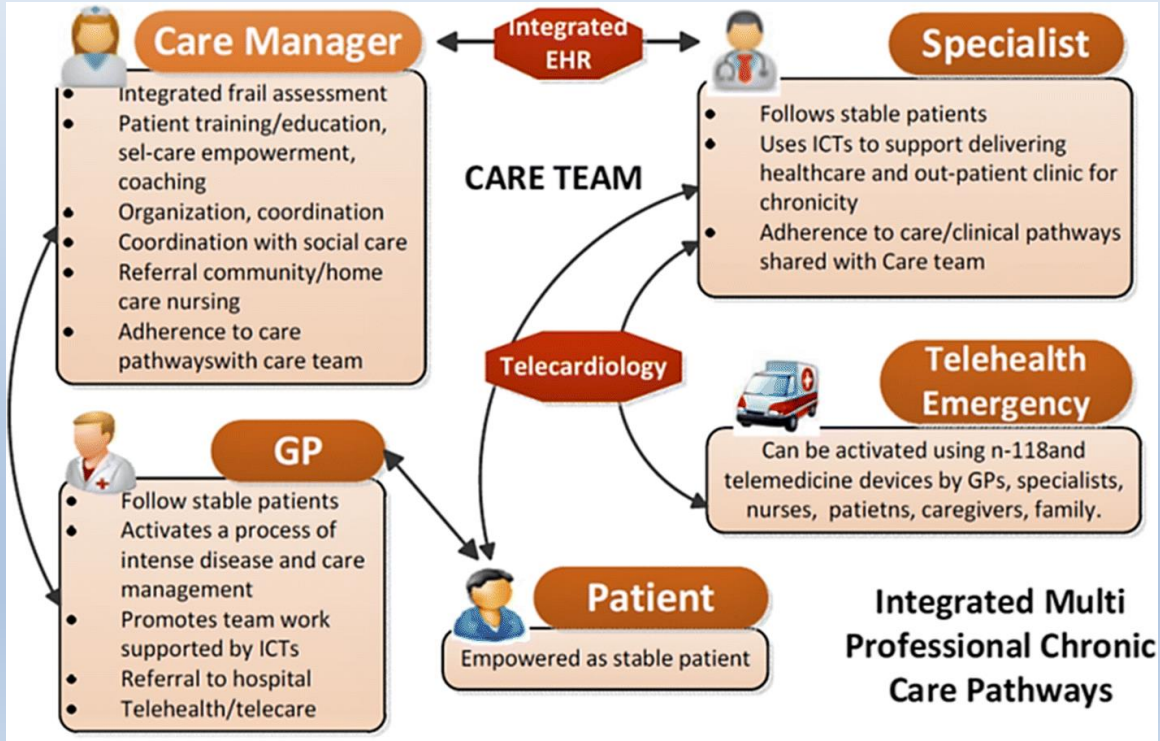
- Highly shortage of trained personnel. The management of chronic diseases at the primary care level highly rely on the physician. The nurses who should carried a vital role as care manager are lack of confidence and not empowered due to lack of training for higher degrees.

Adding to the complexity: chronic diseases issues during pandemic

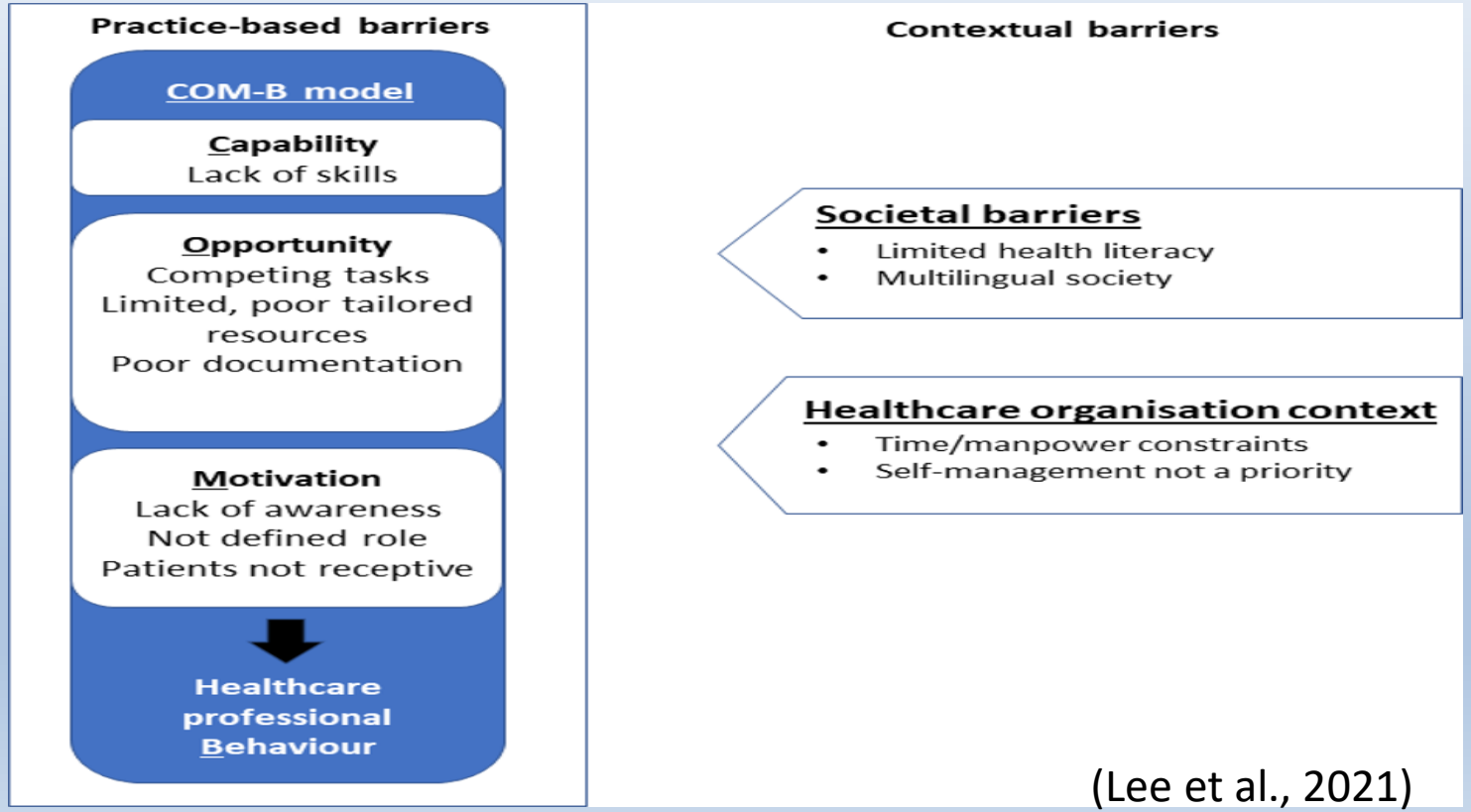
- Shifting of resources in healthcare system to the acute care and optimizing infection control.
- Reduced access to healthcare system, postponement of appointment.
- Vulnerable due to comorbidities and fear to get infected.
- Patients were expected to self-manage their chronic diseases with very minimal support from HCPs

Roles of healthcare professionals in chronic disease management

(Robusto et al., 2018)



Barriers in self-management support in Malaysia



(Lee et al., 2021)

Improving self-management support : A way forward

- Reformation of healthcare management from the traditional paternalistic medical model to a patient-centered care approach

- Embracing patient centered care
  - Patient participation and involvement,
  - The patient–HCP relationship
  - The context of the clinical setting in which the care is delivered.

- Emphasizes changes in HCPs' attitudes, improvements in the healthcare system, increased patient involvement in care, and community engagement in self-care support programs.

- A whole system perspectives that involves intervention at the patient, practitioner and service organisation level.

Self-management support approach (WISE Model)

(Kennedy et al., 2014)

	Patient	Professional	Practice Systems	Wider Health Organisation and Government
Strategy	Make better use of self-management support	Provide better self-management support	Improve access to self-management support	Improve uptake of self-management
Specific method	Find best option for self-management support based on: • Current ability and needs • Personal goals and priorities • A negotiated plan	Training in • Assessing patient's skills, beliefs and values • Shared decision making • Helping patients get access to appropriate self-management support	• Access to training for staff • Access to computer support tools • Regular update of local support options • Ensure patients have easy access to support options • Awareness of barriers to access in the practice	• Guidance and steer for best practice • Commission appropriate self-management support resources • Ensure provision of range of support resources and target to patient needs • Provide training access to improve staff skills
Tools	• PRISMS • Menu of options • Management plan	• Computer template • PRISMS • Explanatory model • Menu of options • Management plan	• Computer template for support tools • Menu of options • Self-management support directory of local groups and organisations	• Evidence from research and NICE guidance

Opportunities for improvement: Adoption of self-management support approach (WISE model)

Micro level

- Change the dimensions of self-care support provision from the medical model, which focuses on clinical outcomes, to a psychological and social sciences model, which incorporates the patient-centered care model.
- Improve the focus of chronic disease management by placing greater concern on patients' individual perspectives and involvement in initiating their behavior change in a way that is compatible with their needs and preferences.
- Increase the engagement and confidence of HCPs in providing effective self-care support, such as the communication approach, focus of care, and training needed to incorporate evidence into their practice.
- give clear guidelines to HCPs and simultaneously define the role of diabetes educators and other HCPs within the continuum of diabetes management more clearly.

Macro level

- Modifying the design of services provided by healthcare organizations (the respective primary care clinics in particular) to be inherent with the philosophy of self-management,
- Redesigning the monitoring and follow-up systems
- Reviewing patients' access to healthcare facilities.

Opportunity of improvement: HCPs as care manager

- The role of HCPs as care managers that function as mediators and care facilitators across the healthcare system have been identified as essential with regards to the patient centered care model in chronic disease management

- Care managers, who work closely with patients to facilitate behavior modification, most strongly contribute to the success of the self-management support provision

- The role of the nurses in Malaysia should go beyond that of diabetes educators/hypertension counsellor, and extended to a more specialist role, such as care manager.

- A higher qualification, such as a master's or doctorate degree in chronic disease management, seems to be crucial for preparing the nurses for a more advanced independent role, which would simultaneously increase their confidence and motivation to provide a high-quality service in supporting patients with chronic disease.

What we did? (Kulliyyah of Nursing Flagship program: Towards Sejahtera community)

- Re-education and training
- Health coaching
- Motivation
- Monitoring
- Evaluation

THANK YOU!