CHAPTER 7

Community Health Diagnosis

Episodes 1-3

Community Health Diagnosis/ Community Diagnosis

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Objectives

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After studying this chapter learners can:

1. explain the concepts and principles of community health diagnosis.
2. explain the process of community health diagnosis.
3. explain how to create a web of causation of health problems.

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Lesson Contents

1.

- Concepts and Principles
- Community Health Diagnosis

2.

- The Process of Diagnosing
- Community Health Diagnosis

3.

- Web of Causation
- **(Linking to Find the Cause of the Problem)**

Episode 1

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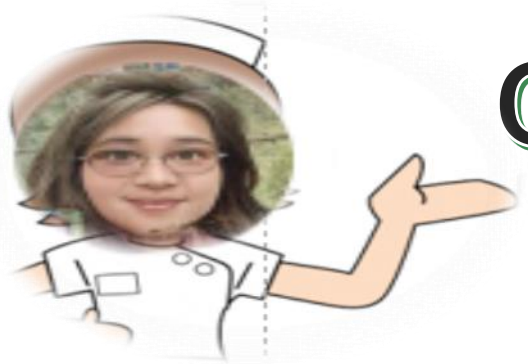
Concepts and Principles

OF



Community Health Diagnosis

Community Health Diagnosis

Clinical Diagnosis vs. Community Diagnosis

Clinical diagnosis = History + Examination + Test

Clinical diagnosis "Decision to give a treatment of the patient"

Community diagnosis = epidemiological data + Conducting Survey + Talk with community

Community diagnosis "Decision to improve health of population in community"

(Krit Thongbanchob, 2020)

How to Conduct Community Diagnosis?

Community data study

Health status of population
- Primary data
-Secondary data

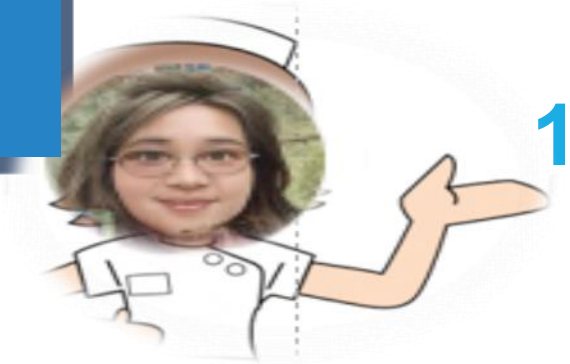
Problems identification

Priority setting

Theory web of causation

(Krit Thongbanchob, 2020)

The Process of Diagnosing



1. Identify Problem

2. Priority Setting

3. Web of Causation of Community Health Problem

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What is the problem?

Concepts about community health problems

Concept 1: Problem approach

Community health problems must be ***problems in themselves***, that is, they are things that directly affect the health of people and communities, such as sickness and death. It is primarily a community health problem.

(Parinya Jitaram, 2021)

What is the problem?

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Concepts about community health problems

Concept 2

Community health problems are not problems in themselves but are ***causes/tools that lead to community health problems***, such as unclean water, and dirty food, which lead to the spread of diarrhea outbreaks.

(Parinya Jitaram, 2021)

What is the problem?

Epidemiological principles & Community concerns. If any **D** found is considered a problem.

- If a problem consists of many **D** factors, it will make the problem:
1) increase the size of the problem
2) increase the importance of the problem
3) greater impact on the health of the community

1) Death
อัตราตาย

2) Disability
ความพิการ

3) Diseases
ปัญหาหรืออัตราป่วย

4) Discomfort
ความรู้สึกไม่สุขสบาย

5) Dissatisfaction
ความรู้สึกไม่พึงพอใจ

(Parinya Jitaram, 2021)

What is the problem?

Compare criteria/standard values

- Criteria/standard values can be obtained from WHO, national development plans, etc.
- The problem information must be presented in quantitative form such as percentages, or ratios.

1) Death
อัตราตาย

2) Disability
ความพิการ

3) Diseases
ปัญหาหรืออัตราป่วย

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(Parinya Jitaram, 2021)

Community Health Problem

Community health problem is caused by disease, risky behavior, or risky problems that lead to disease or health problems resulting in people in the community not living as long as they should.

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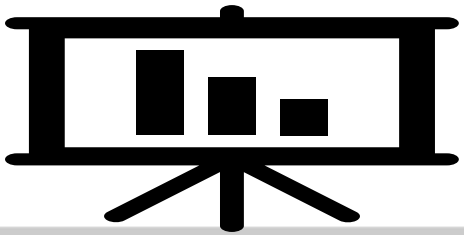
to be continued



Episode 2

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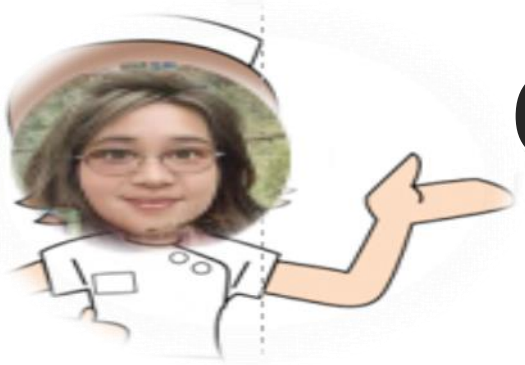
The Process of Diagnosing



Community Health Diagnosis

How to Conduct Community Diagnosis?

Community Data Study

Health Status of Population
- Primary data
-Secondary Data

Problems identification

Priority setting

Theory web of causation

(Krit Thongbanchob, 2020)

The Process of Diagnosing

1. Identify Problem

2. Priority Setting

3. Web of Causation of Community Health Problem

Prioritizing Community Health Problems

The process of deciding which problems to solve in order of priority using appropriate methods.

1. John J. Halon method (Hanlon & Pickett, 1984)

This method must come from the continuous work of the same team in considering 4 components:

Component of Problem Identification

1) A : Size of the Problem	**2) B: Seriousness of the Problem** • Urgency (ความเร่งด่วน) • Severity (ความร้ายแรง) • Economic Loss (การสูญเสียทางเศรษฐกิจ) • Involvement of Other Peoplem (ความเกี่ยวข้องของประชากรกับปัญหา)	3) C: Effectiveness of intervention	4) D: Limitation

2. World Health Organization method

Determine how to prioritize problems to suit the situation.

1) Public Health In the Western Pacific

(Complex problem)

- Suitability
- Size of problem
- Community interest
- Policy support

(Parinya Jitaram, 2021)

2) Guide Index
(Uncomplex problem)

- Size of problem
- Importance of the problem
- Suitability of Technology

3. The 5 D method

This method can be used to identify problems and prioritize them by using the principles of epidemiology.

1) Death
อัตราตาย

2) Disability
ความพิการ

3) Diseases
ปัญหาหรือ
อัตราป่วย

4) Discomfort
ความรู้สึก
ไม่สุขสบาย

5) Dissatisfaction
ความรู้สึก
ไม่พึงพอใจ

(Parinya Jitaram, 2021)

4. Nominal Group Processing

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The method of group process (Nominal Group Processing) is leadership/selection.

Components

1) The importance of the problem or the impact of the problem on the community

2) Pro and con in solving problems.

3) The ability of the community to solve problems

(Parinya Jitaram, 2021)

5. Method of the Department of Provincial Administration, Ministry of Interior (วิธีของกรมการปกครองกระทรวงมหาดไทย)

- ✓ The size of the affected group
- ✓ Seriousness and urgency
- ✓ The future damage
- ✓ Community acceptance

(Parinya Jitaram, 2021)

6. Method of the Faculty of Public Health, Mahidol University

Components			
1.Size of problem	2. Severity of the problem	3. Difficulty and readiness in problem solving	4. Community awareness and cooperation in solving problems

Summarize Score

Additive Method

Multiplicative Method

(Parinya Jitaram, 2021)

Components Criteria

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1. Size of problem

Size of problem	Score
No Problem	0
>0 – 25%	1
26% - 50%	2
51% - 75%	3
76% - 100%	4

2. The severity of the problem

The severity of the problem	Score
No Problem	0
>0 – 15%	1
16% - 50%	2
51% - 75%	3
76% - 100%	4

(Parinya Jitaram, 2021)

Components Criteria

3. Ease of management of susceptibility to management/Feasibility

Ease of management	Score
Cannot solve	0
Very difficult to solve	1
Difficult to solve	2
Easy to solve	3
Very easy to solve	4

4. Community concern

Number of people who concern	Score
0	0
1 - 25%	1
26 - 50%	2
51 – 75%	3
76 – 100%	4

(Parinya Jitaram, 2021)

Prioritizing Health Problems Worksheet

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Problem identified	Components Score				Total score		Ranking
	Prevalence	Severity	Feasibility	Community Concern	Additive Method	Multiplicative Method	
1. 37.5% of the population 35 years and over suffer from HT.							
2. 58% of households have unsanitary waste disposal.							
3. 74% of older people have a poor (low) level of mental quality of life.							

Organizing a community forum

Organizing a community forum

A community is a gathering of community members to join together in various activities of the community themselves.

It is a stage for discussion, exchange, and discussion statements (not used to argue) about information.

character

Official: by organizing a forum or meeting

Informal, such as small group discussions in the temple hall, occasional meetings

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Organizing a community forum

1.Preparatory stage

- Study community information
- An operations team
- set objectives
- target group
- Period for organizing a community forum
- Content issues in organizing important community forums

2. Process

- Build familiarity
- Inform the purpose and agreement of the meeting.
- Set expectations
- Community education
- Identify problems together
- Find good things in the community
- Find development partners
- Set development goals
- Working together to plan projects
- Select a core group to be responsible for implementing the project

3. Evaluation and follow-up steps

- - Operators and stage participants summarized the results of the community forum together.
- - Community leadership officers, local leaders, and stakeholders coordinate with various sectors and organizations to support operations.
- - Officials, local leaders, and community leaders help stimulate the next community forum.

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Pictures of the community forum at Thung Khwang Subdistrict, Kamphaeng Saen District

Prioritizing Health Problems Worksheet

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Problem identified	Components Score				Total score		Ranking
	Prevalence	Severity	Feasibility	Community Concern	Additive Method	Multiplicative Method	
1. 37.5% of the population 35 years and over suffer from HT.	2	3	2	4	11	48	1
2. 58% of households have unsanitary waste disposal	3	2	3	1	9	18	2
3. 76% of older people have a poor (low) level of mental quality of life.	4	2	3	2	11	48	1

Prioritizing Health Problems Worksheet

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Problem identified	Components Score				Total score		Ranking
	Prevalence (x1)	Severity (x2)	Feasibility (x1)	Community Concern (x2)	Additive Method	Multiplicative Method	
1. 37.5% of the population 35 years and over suffer from HT.	2x1=2	3x2=6	2x1=2	4x2=8	18	192	1
2. 58% of households have unsanitary waste disposal	3x1=3	2x2=4	3x1=3	1x2=2	12	72	3
3. 76% of older people have a poor (low) level of mental quality of life.	4x1=4	2x2=4	3x1=3	2x2=4	15	192	2

WEIGHTING

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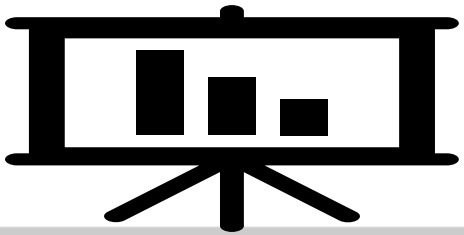

Episode 3

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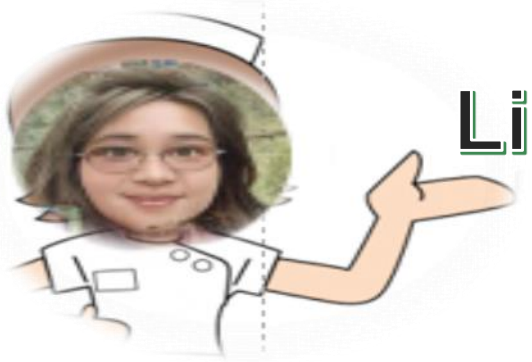
Web of Causation of Community Health Problem



Linking to Find the Cause of the Problem

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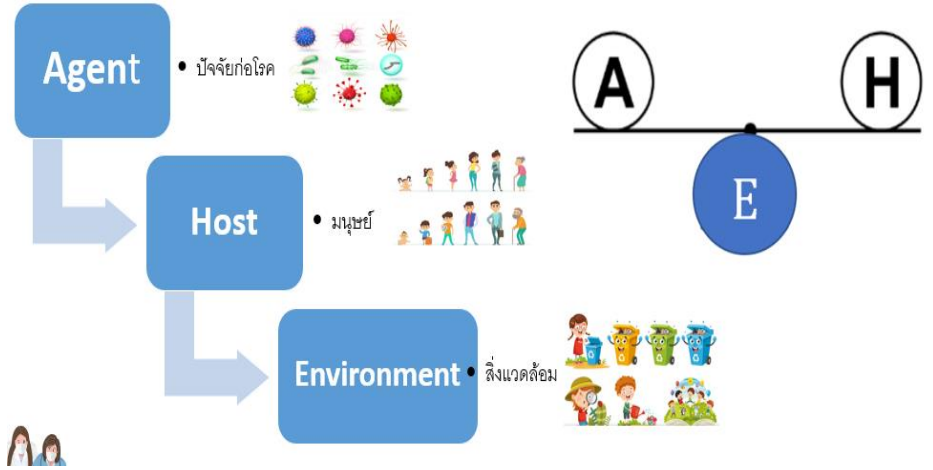
Web of Causation

Web of causation is the way to explain where a disease comes from in the most holistic way possible, taking into account that diseases originate from different factors and considering the person as a whole.

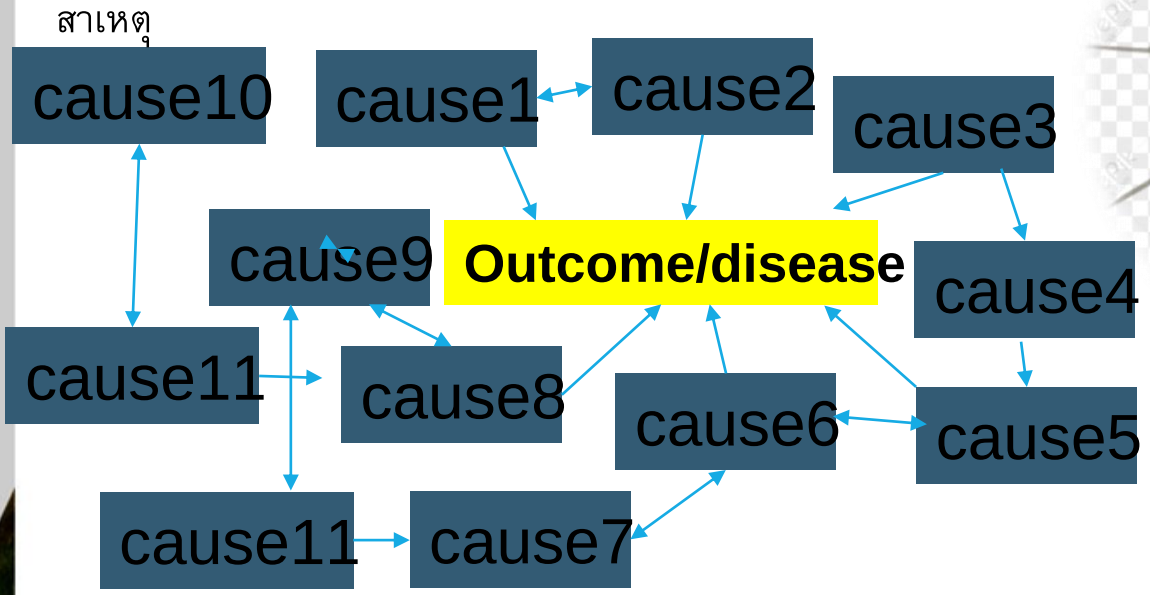
(Kay, 2022)



(Waelveerakup, 2022)

Web of causation of disease

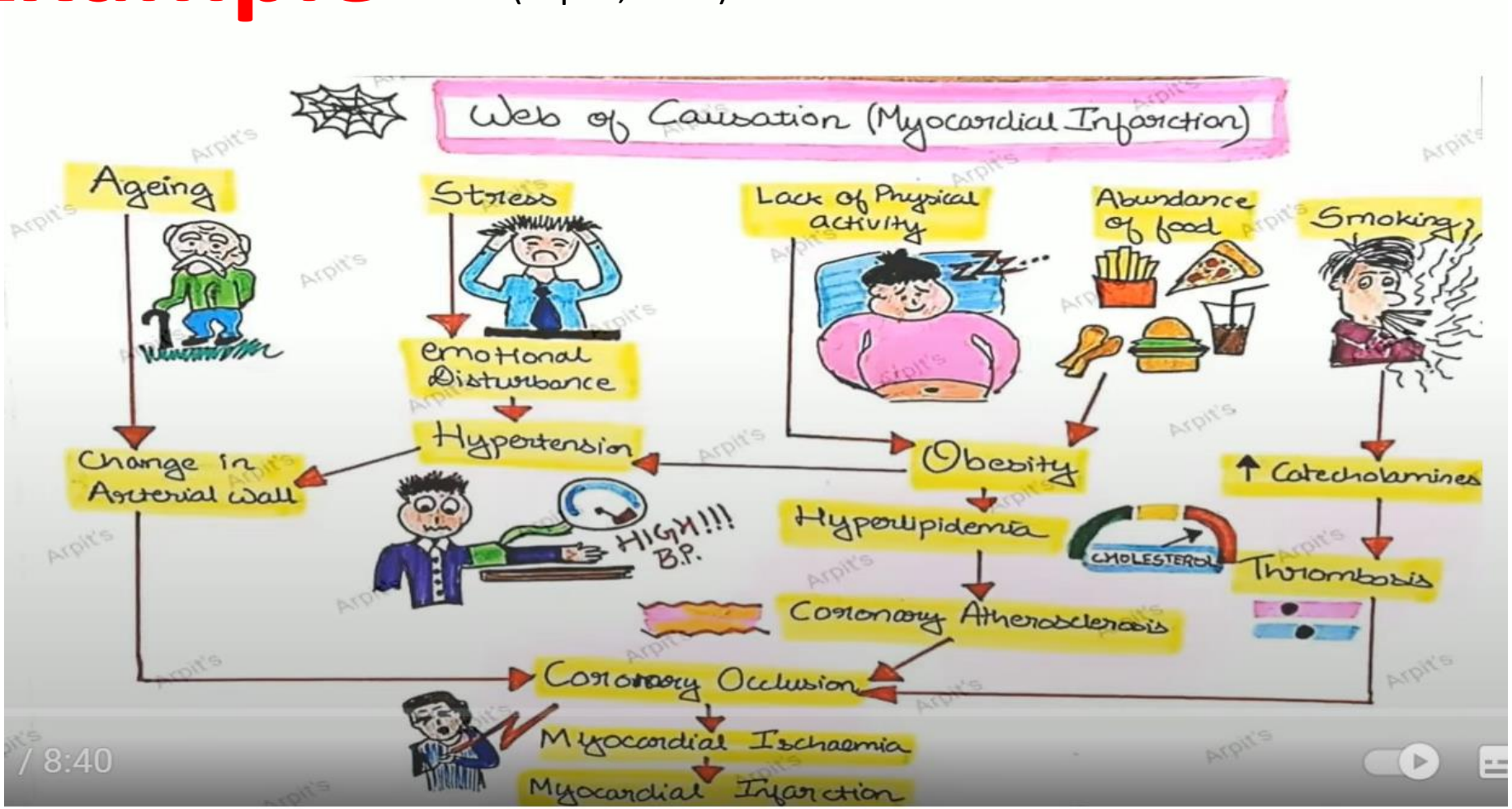
- A "web of causation" includes all the predisposing factors of any type and their complex relations with each other and with the disease.



(Waelveerakup, 2022)

Example

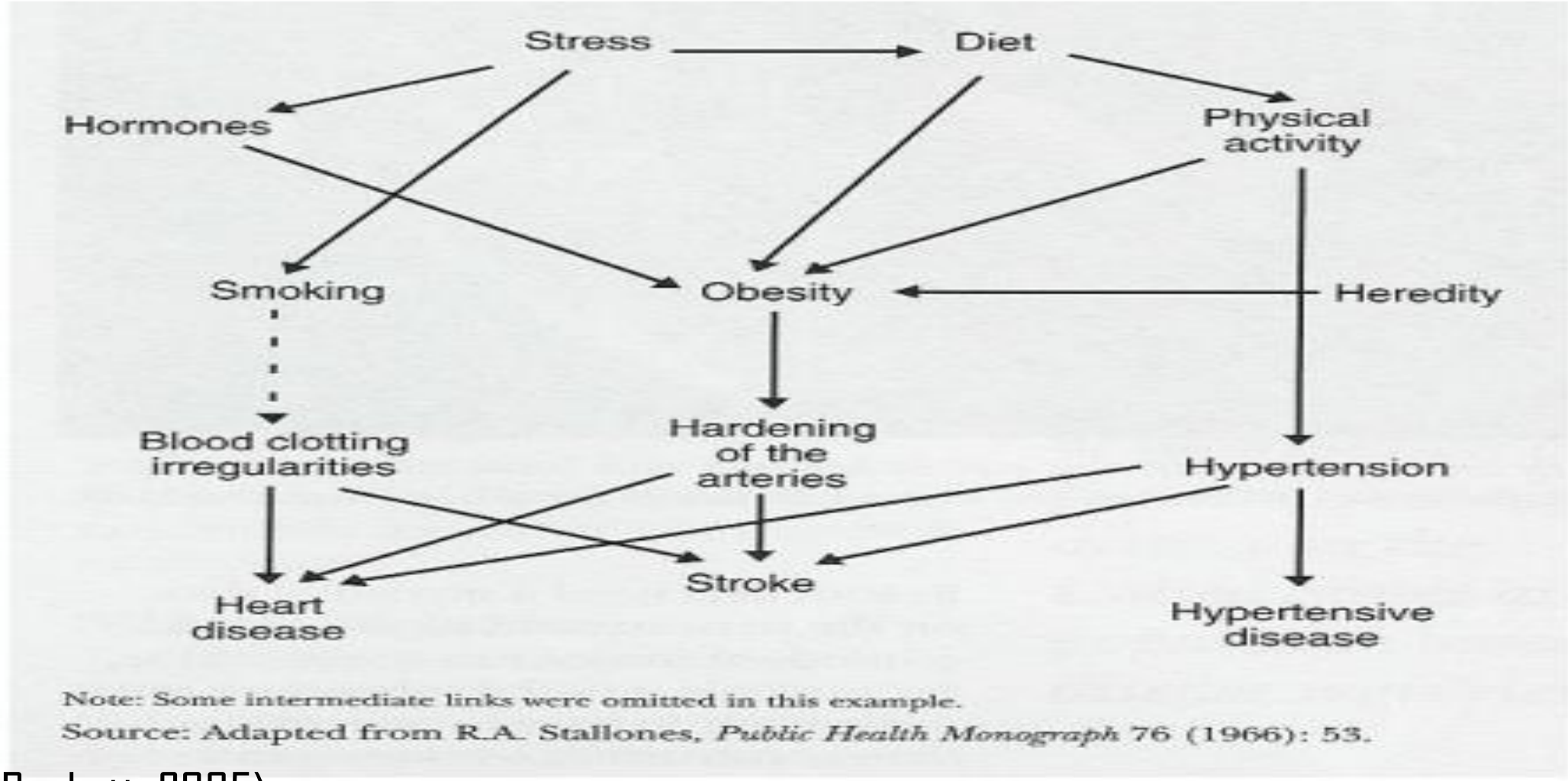
(Arpist, 2020)



https://www.youtube.com/watch?v=QF8ZUj6vcd0&ab_channel=ArpitsPSMmadeeasy

Example

Ian R.H. Rockett, PhD, MPH
Department of Community Medicine
and Injury Control Research Center
West Virginia University School of Medicine
Prepared under the auspices of the Southeast Public Health Training Center, University of North Carolina, Chapel Hill, 2005.



(Rockett, 2005)

Example

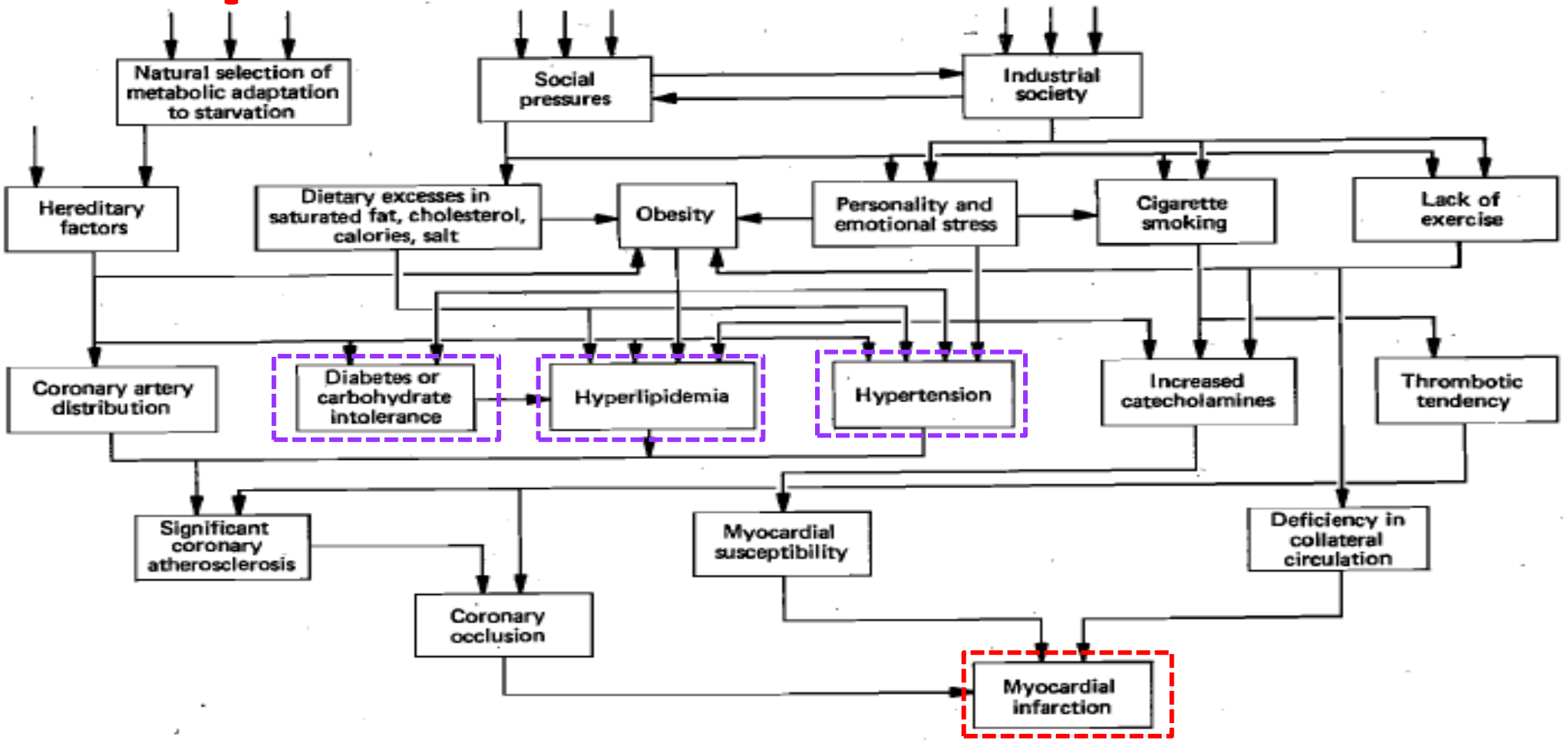
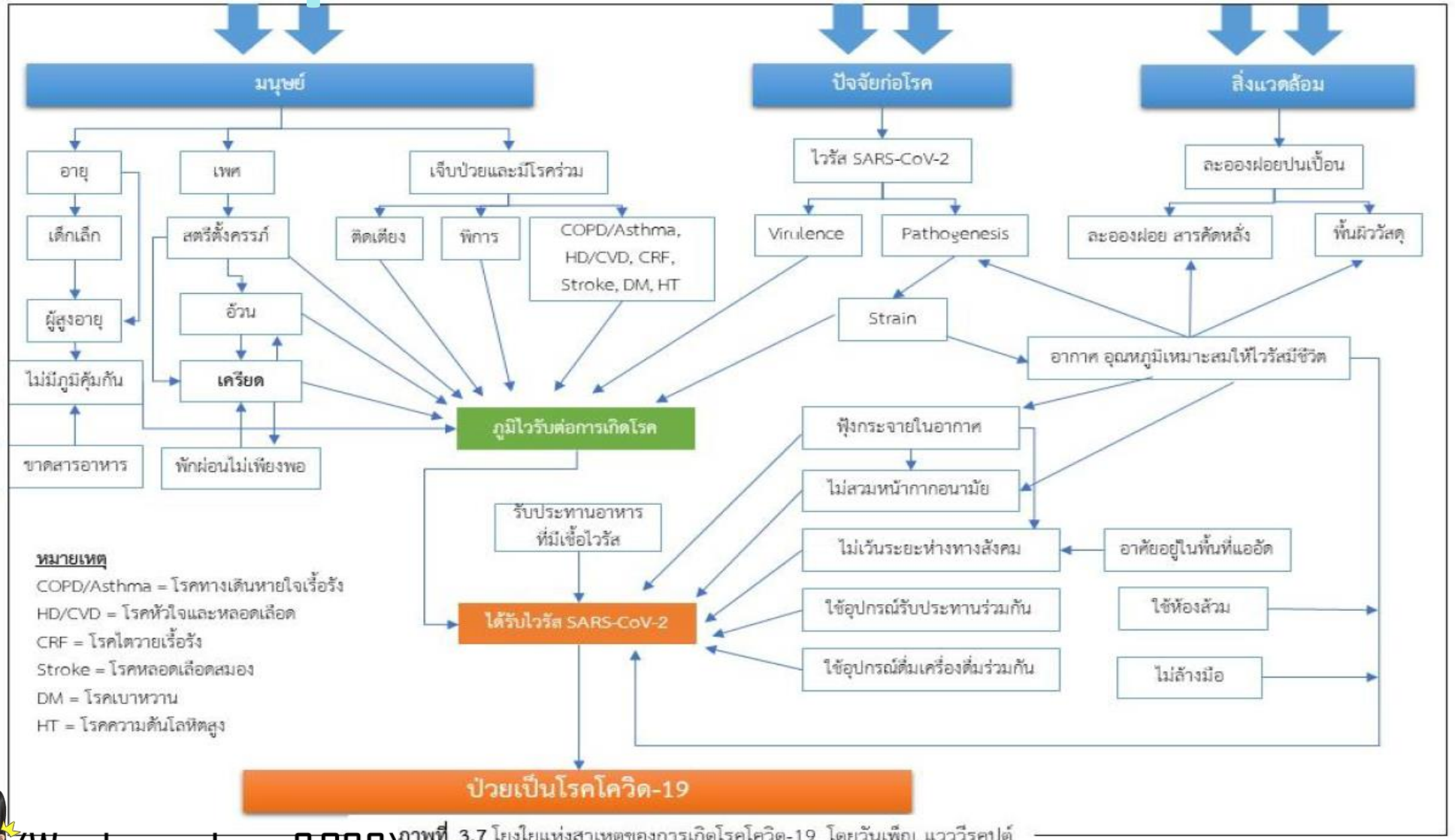


Figure 1-1 The web of causation for myocardial infarction: a current view.

(Friedman, 1974)

Example



ภาพที่ 3.7 โยงใยแห่งสาเหตุของการเกิดโรคโควิด-19 โดยวันเพ็ญ แววีรคุปต์

(Waelveerakup, 2022)

Summarize

1.

Concepts and Principles

Community Health Diagnosis

2.

The Process of Diagnosing

Community Health Diagnosis

3.

Web of Causation

(Linking to Find Cause of the Problem)

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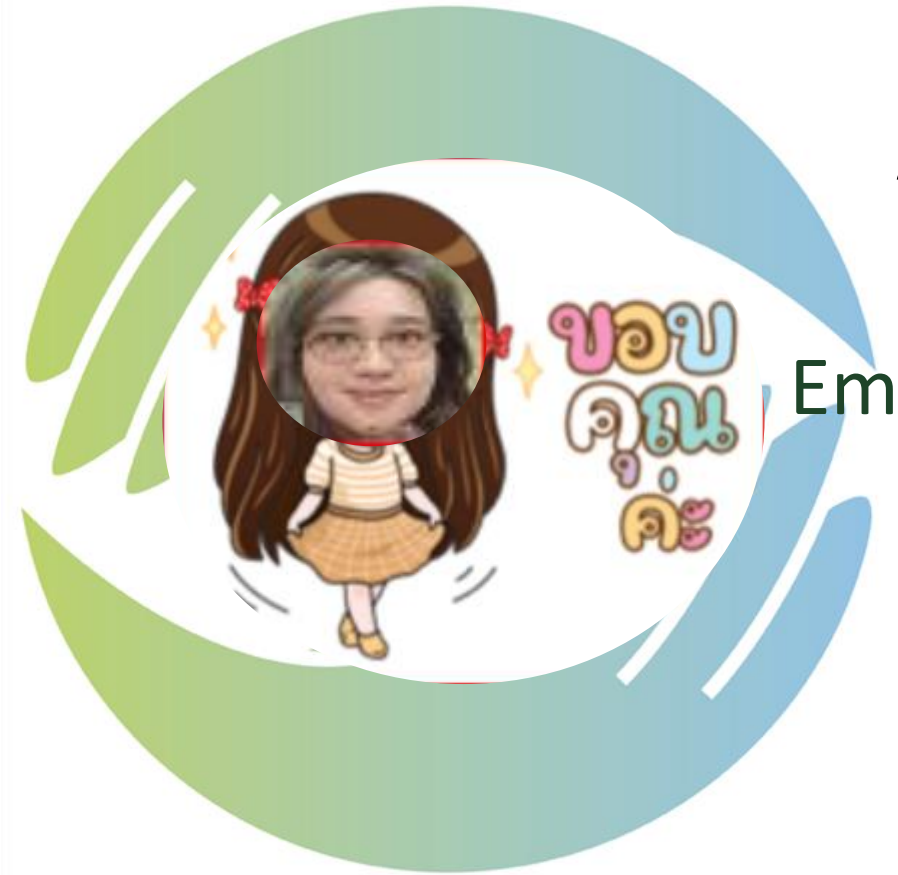

Thank You

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