

# Pharmacy training at Mahidol University in COVID-19 period

Assist. Prof. Pitchaya Dilokpattanamongkol

Faculty of Pharmacy, Mahidol University

# Outline

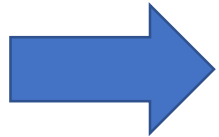
- Background: residency training in Thailand
- Training during COVID-19 period
- Experiences, management and suggestions

# Background

- Residency training in Thailand
  - In the control of: The College of Pharmacotherapy of Thailand
  - 4-year training program
    - R1 – internal medicine, training at Mahidol university hospital
    - R2-R3 – following specialty, training at hospital following specialty
    - Fellowship – research
  - Certificate
    - 1<sup>st</sup> year: General residency in Pharmacotherapy
    - 3<sup>rd</sup> year: Specialized residency in .....pharmacotherapy
    - 4<sup>th</sup> year: Specialized fellowship in .....pharmacotherapy
    - In all: Board Certified Pharmacotherapy Training Program (BCP)

# Academic year calendar

- Academic year 2019
  - Started from August 2019 to July 2020
- 12 months training/1 academic year



2019																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Aug	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo
Sep	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	
Oct	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th
Nov	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
Dec	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu
2020																															
Jan	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr
Feb	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo
Mar	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu
Apr	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr
May	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
Jun	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We
Jul	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr

# Covid-19 period

March 2020  
– June 2020

- R1 = 2
- R2 = 8
- R3 = 3
- Fellow = 3

July 2020-  
June 2021

- R2 = 2
- R3 = 8
- Fellow = 3

July 2021-  
June 2022

- R1 = 2
- R3 = 2
- Fellow = 8

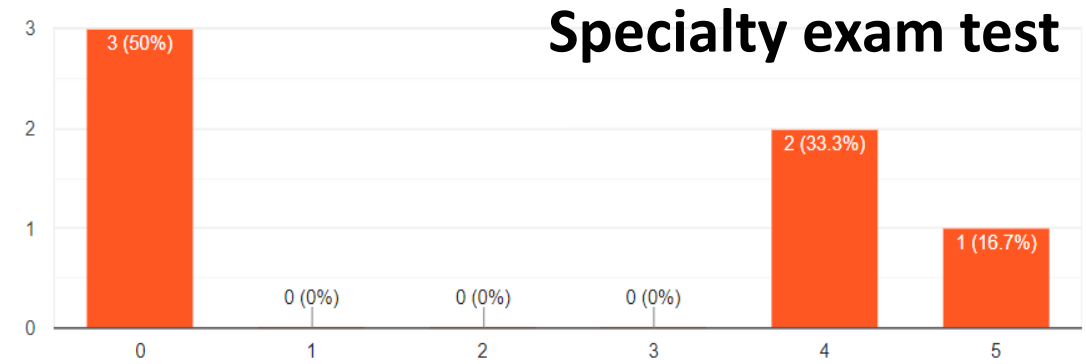
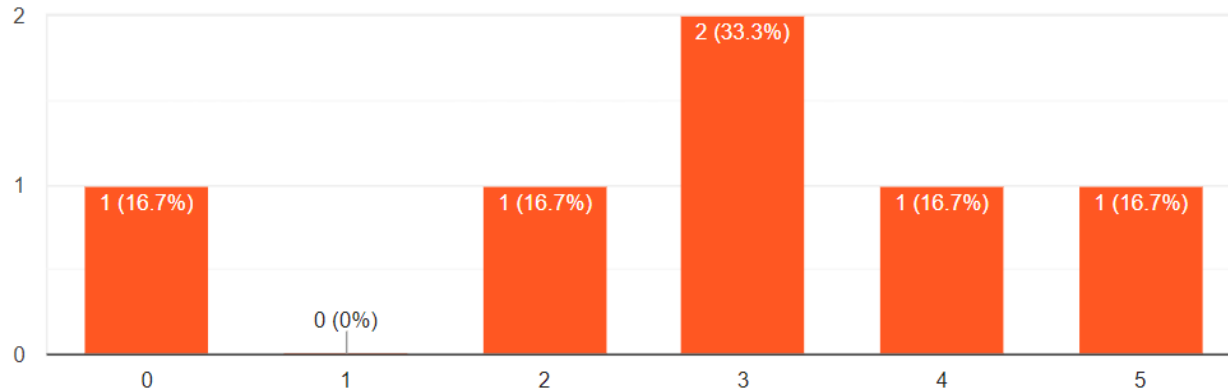
Specialty; cardiology, internal medicine, infectious disease, critical care, pediatric, oncology, geriatric

# Academic year 2019 (March 2020 – July 2020)

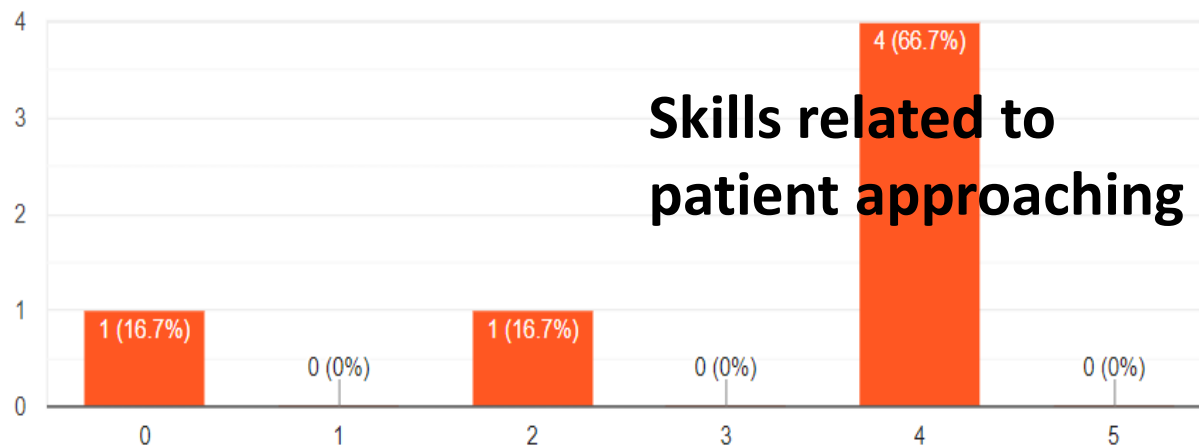
- Residency
  - R1 = 2, R2 = 8, R3 = 3, ~~Fellow = 3~~
- 50% plan changed
  - Affect around 1-6 months
- What was changed?
  - From hospital training to home-based learning
  - Decreasing hours/days of being at hospital
  - From bedside round activities to online activities

# Aspects from residents

## Learning curve



## Skills related to patient approaching



# Academic year 2020 (Aug 2020 – July 2021)

- Residency
  - R2 = 2, R3 = 8, Fellow = 3
- 50% plan changed
  - Affect around 1-3 months
- What was changed?
  - From hospital training to home-based learning
  - Decreasing hours/days of being at hospital
  - From bedside round activities to online activities
  - Decreasing patients in training sites

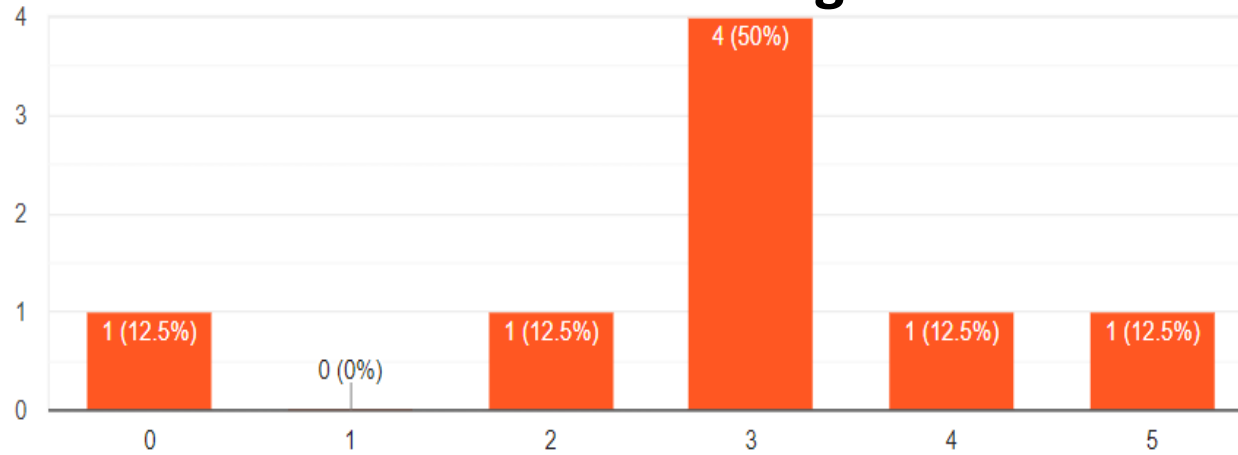


# What happened?

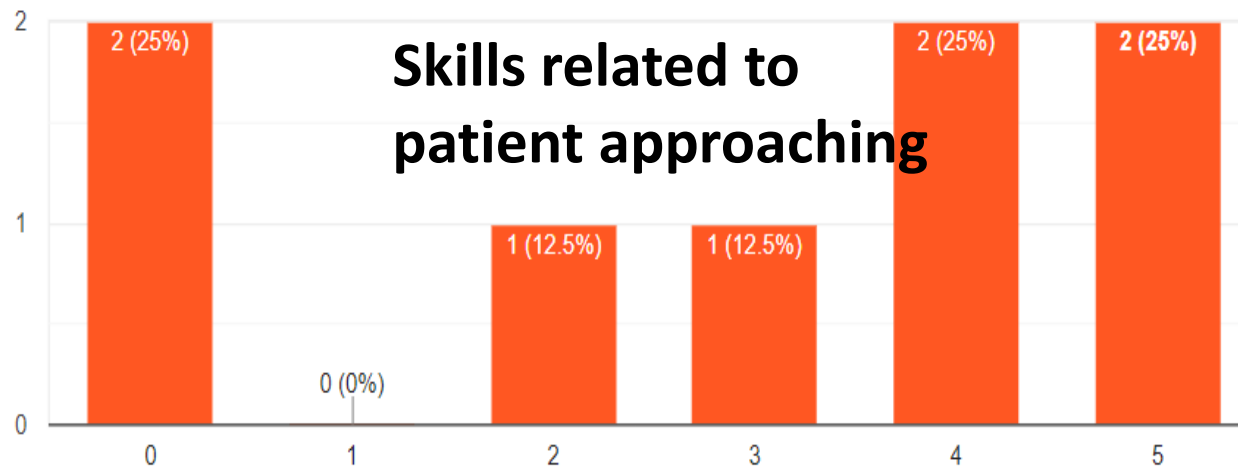
- Unexpected covid-19 patients found during ward round
  - Training termination/ training was unexpectedly discontinued
  - Quarantine was needed
  - Wards were temporarily closing
  - Cases in wards were limited/ decreased
- Almost 100% of activities were online discussion

# Aspects from residents

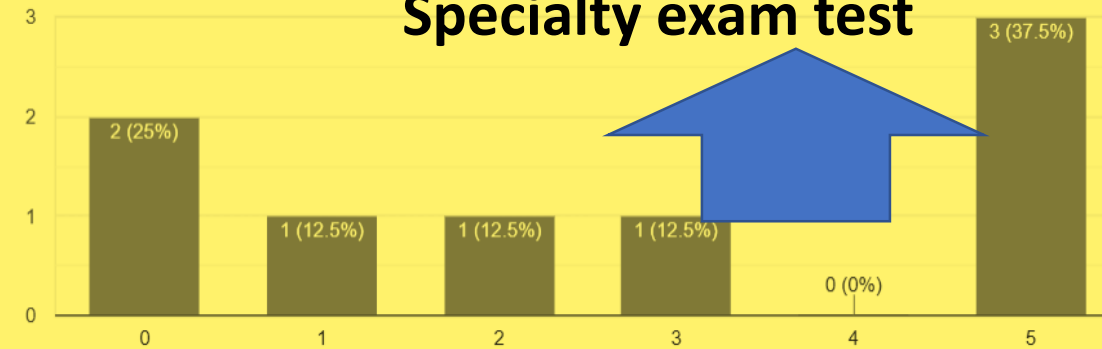
## Learning curve



## Skills related to patient approaching



## Specialty exam test



# Academic year 2021 (June 2021 – now)

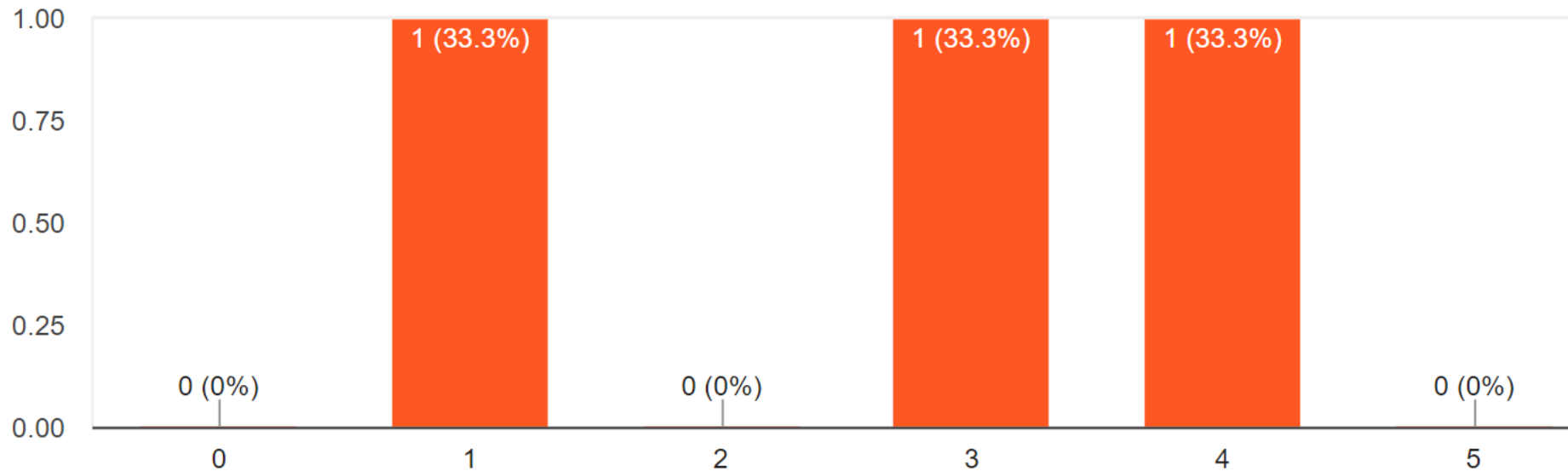
- Residency
  - R1 = 2, R3 = 2, Fellow = 8
- **25%** plan changed
  - Affect around 1-**3** months
- What was changed?
  - ~~From hospital training to home-based learning~~
  - Decreasing hours/days of being at hospital
  - From bedside round activities to online activities
  - Decreasing patients in training sites

# Aspects from residents

**Skills related to  
patient approaching**

**Learning curve**

**Specialty exam test**



Results: specialty exam test

- ✓ Paper-based examination
- ✓ Oral case examination
- ✓ Proposal defense
- ✓ Thesis defense

# Summary



## Limitations

- Residency learning curve
- Decreased number of patients
- Decreased number of wards

## Opportunity

- Research aspects
- More online activities
- Fast and easier communications between healthcare providers by using technology/ not face-to-face approach

