

# Challenges in Response to COVID-19 Pandemic and for the Future : Nursing Education in Japan

---

**Naoki YOSHINAGA, PhD, RN.**



**Japan Academy of Nursing Science**

公益社団法人日本看護科学学会

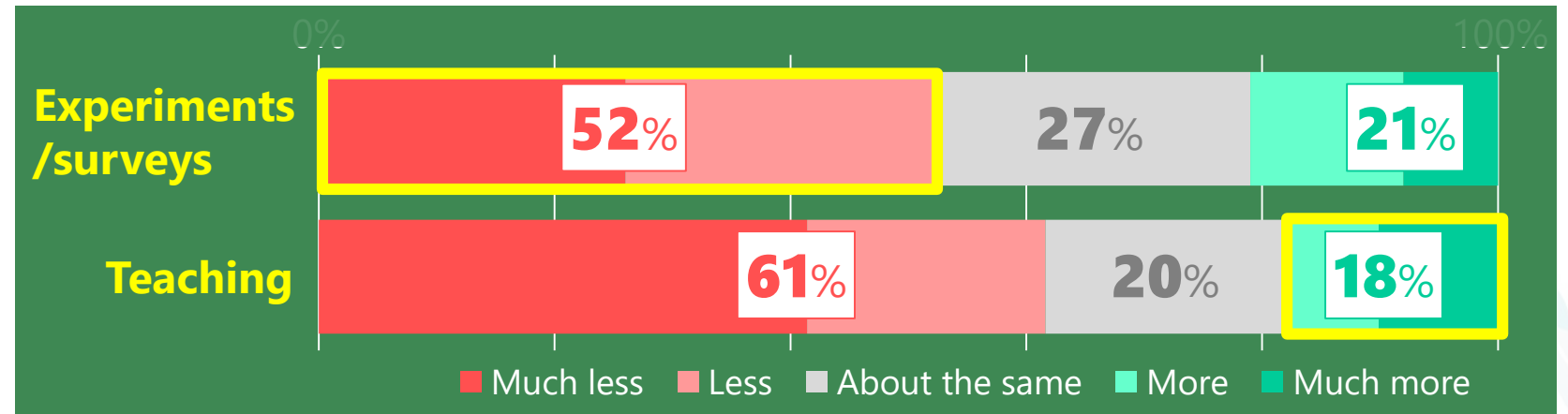
**School of Nursing, Faculty of Medicine, University of Miyazaki, Japan**

# The early impact on the scientific community

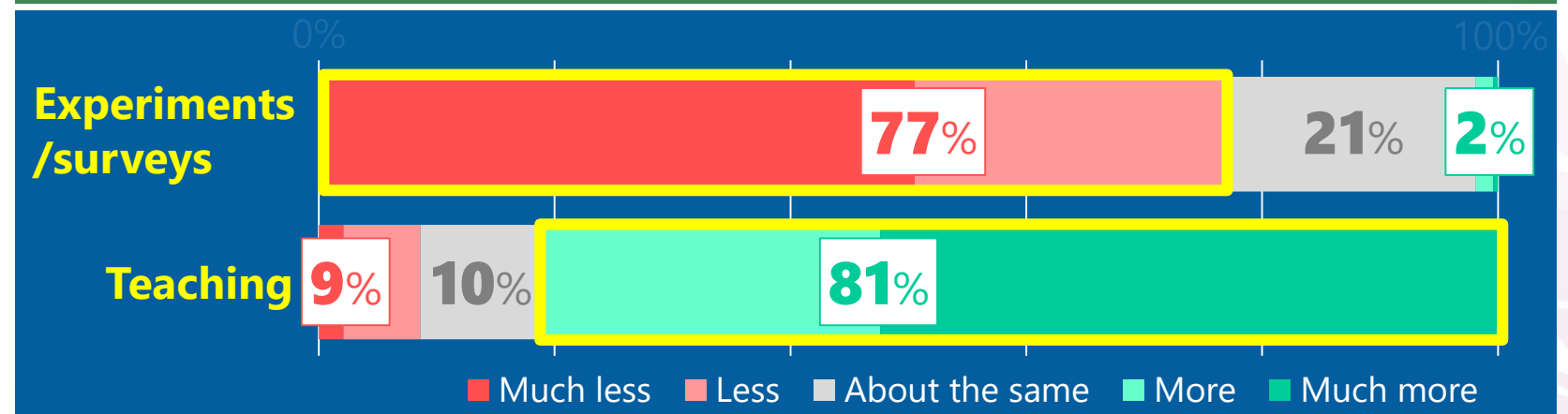
Q. Are you spending more, less, or about the same amount of time on the following activities compared to before the pandemic?

## ResearchGate

- Global scientific community
- Conducted in Mar. 2020
- N = 3,000

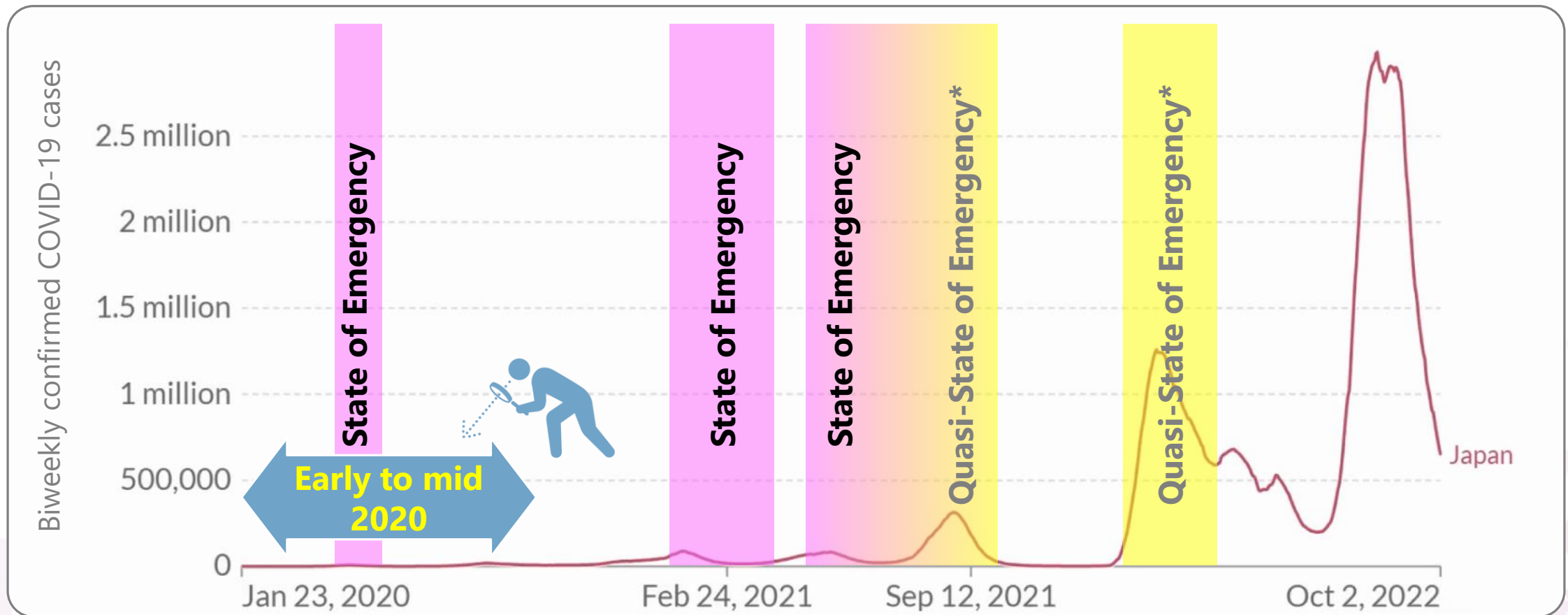


- Japanese nursing faculties
- Conducted in Jul. 2020 (asking Apr-Jun 2020 situation)
- N = 1,023 (academic-based)



# The COVID-19 pandemic in Japan

● Population: approx. 125.7 million



\* A quasi-state of emergency is more limited in terms of coverage and restrictions than a full state of emergency

## How clinical practicum was affected by the early stages of the pandemic

# Report: Survey on the impact of COVID-19 on nursing clinical practicum in FY2020 (published April 2021)



Quality Improvement Committee for Nursing Education  
Japan Association of Nursing Programs in Universities (JANPU)

日本看護系大学協議会 看護学教育質向上委員会  
2020年度 COVID-19に伴う看護学実習への影響調査  
A調査・B調査報告書

2021年4月

## What we have learned & implications for the future

# Report: Maintenance and improvement of the quality of education in clinical practicum at universities with nursing programs (published June 2021)



**MEXT** MINISTRY OF EDUCATION,  
CULTURE, SPORTS,  
SCIENCE AND TECHNOLOGY-JAPAN

Expert panel seeking ideal form of clinical practicum at universities with nursing programs under the new coronavirus pandemic

新型コロナウイルス感染症下における看護系大学の  
臨床実習の在り方に関する有識者会議 報告書  
看護系大学における臨床実習の教育の質の維持・向上について

令和3年(2021年)6月8日

# About the survey

How clinical practicum was affected by the early stages of the pandemic

## Report: Survey on the impact of COVID-19 on nursing clinical practicum in FY2020 (published April 2021)



Quality Improvement Committee for Nursing Education  
Japan Association of Nursing Programs in Universities (JANPU)

日本看護系大学協議会 看護学教育質向上委員会  
2020年度 COVID-19に伴う看護学実習への影響調査  
A調査・B調査報告書

2021年4月

**Participant** : Nursing clinical/practicum course directors (based on Survey B)

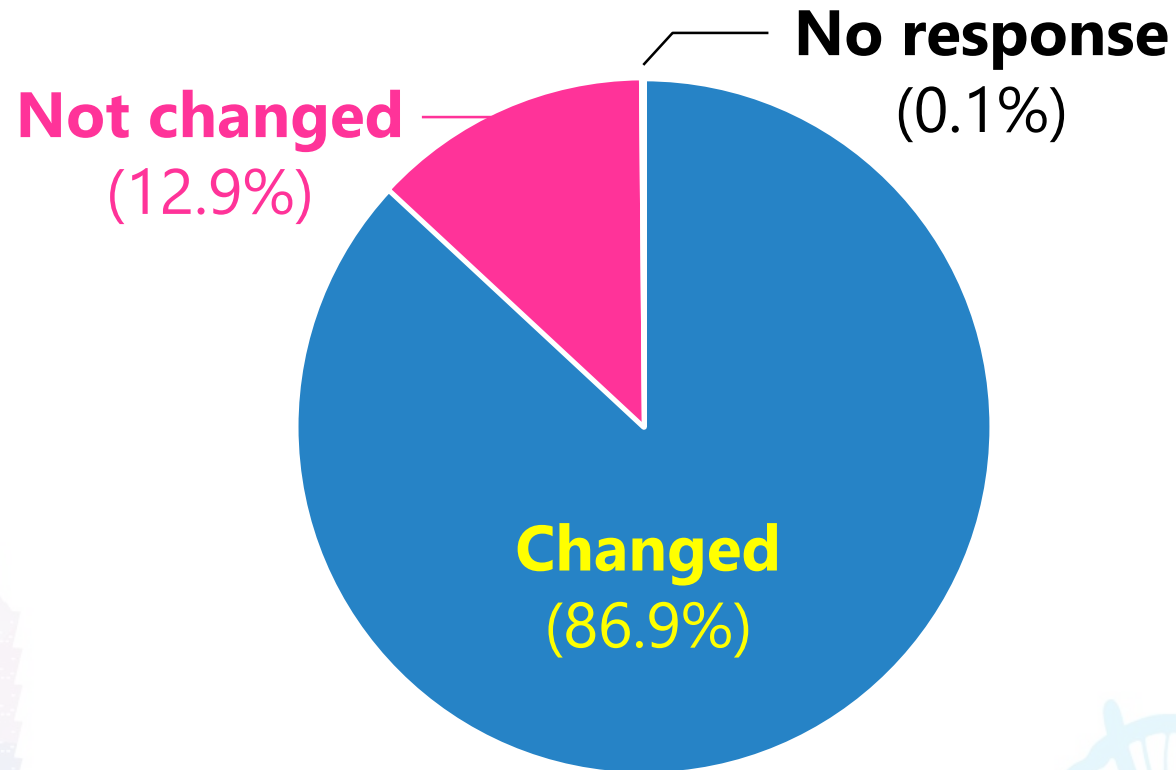
**Survey period:** Oct 9 – Nov 6, 2020

\* Asked about practicum courses offered **from Jan to Sept, 2020**

**Response rate:** **87.1%** (250/289 universities [incl. 1,489 course directors])

# Changes in practicum content/methods

Q. Have you changed the content/methods of the practicum due to the pandemic?



N = 1,483 courses

# How on-site practicum was affected

---

Note: multiple choices allowed

## Measures taken to continue on-site practicum:

Among 1,289 course directors...

**58.5%** reduced the total hours of on-site practicum

**37.0%** changed practicum facility

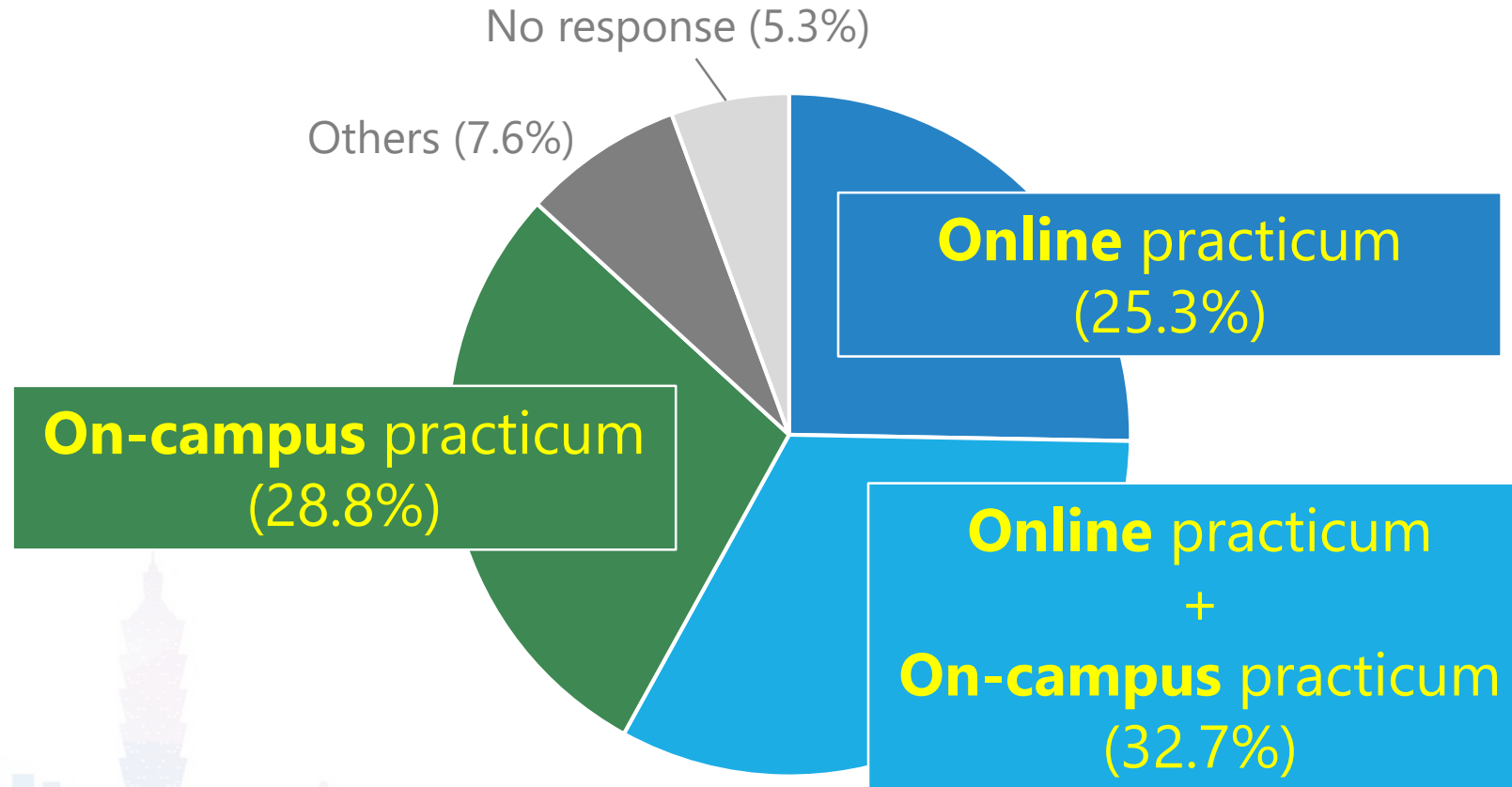
**25.7%** reduced the number of students allocated to each practicum facility

However...

**74.1%** cancelled on-site practicum

# Alternative forms of on-site practicum

(if the on-site practicum was cancelled, postponed, or shortened)



n = 1,289



# Ex. of employing **imitation ward**: Pediatric Nursing

	Practicum facility	University campus
Students	<b>Prohibited</b>	<b>Allowed</b>
Educators	<b>Prohibited</b>	<b>Allowed</b>



青森中央学院大学  
Aomori Chuo Gakuin University

Imitated an inpatients' ward on campus



Imitation ward



Imitation room



Role-play using manikin simulator

# Ex. of using video materials: Home Care Nursing



	Practicum facility	University campus
Students	<b>Prohibited</b>	<b>Allowed</b>
Educators	<b>Allowed</b>	<b>Allowed</b>

Nursing process

Orientation

Assessment

Diagnosis

Planning

Implementation

Evaluation



(recorded by faculty staff)  
@Home-visit nursing station



(recorded by faculty staff)  
@Client's home (2 times)



Role-play



Web conference  
(with clinical instructor)

# Ex. of using **virtual reality (VR)**: Critical Care Nursing

	Practicum facility	University campus
Students	Operation room: <b>Prohibited</b> ICU & HCU: <b>Prohibited</b> Inpatients' ward: <b>Allowed</b>	<b>Allowed</b>
Educators	(No information)	<b>Allowed</b>



FUJITA HEALTH UNIVERSITY



Inpatients' ward practicum



ICU-specific VR



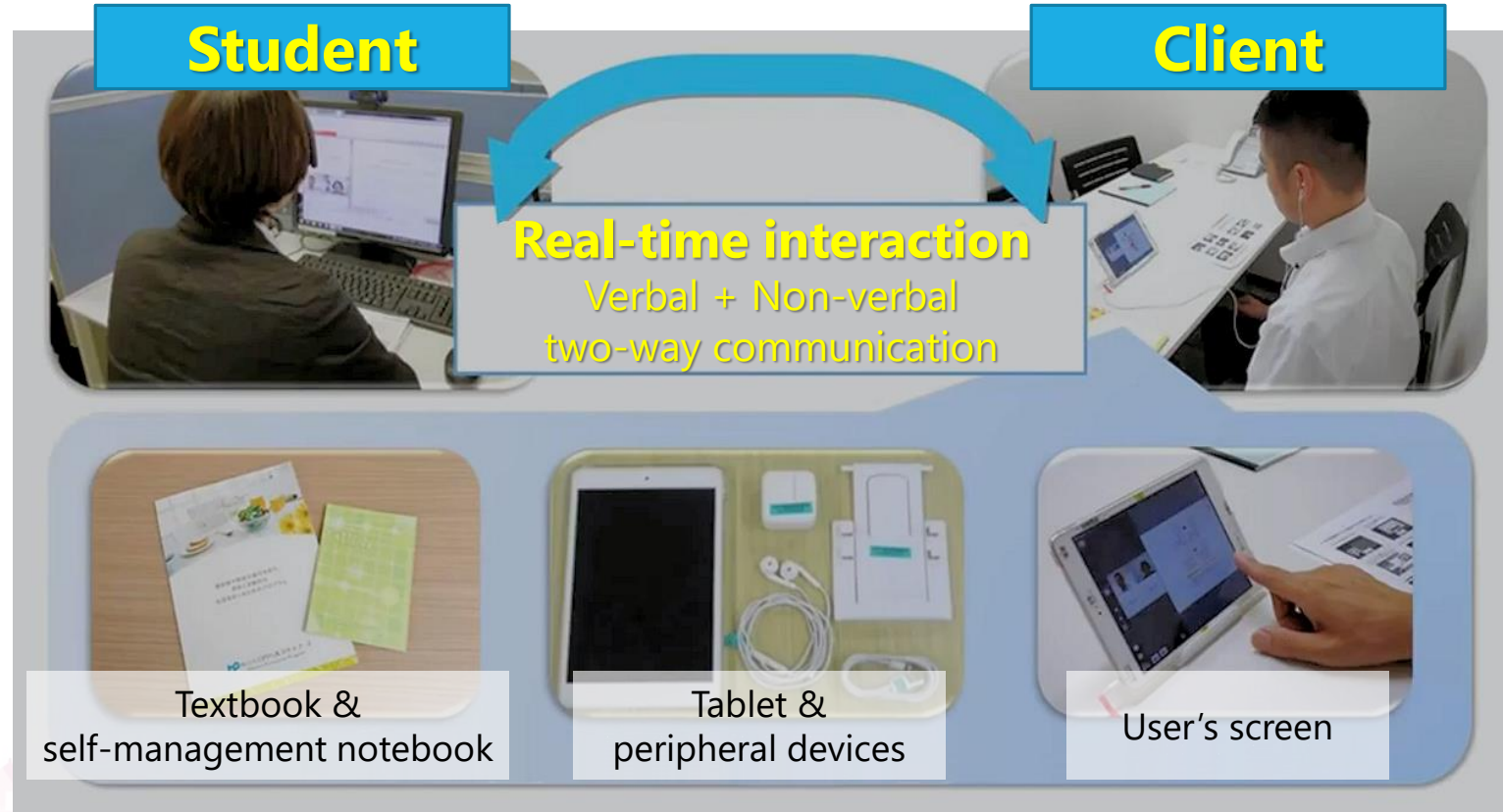
Discussion/feedback

# Ex. of using telehealth: Chronic Care Nursing



HIROSHIMA UNIVERSITY

	Practicum facility	University campus
Students	<b>Prohibited</b>	<b>Prohibited</b>
Educators	<b>Prohibited</b>	<b>Prohibited</b>



**Note:** Prof. Moriyama and her colleagues had been conducting research on telehealth for clients with chronic diseases since before the pandemic

# Alternative methods used/applied

(if the on-site practicum was cancelled, postponed, or shortened)



**Case study (scenario)**

**80.1%**



**Simulator**

**37.2%**



**Invited client/patient**

**13.0%**



**Audio-visual materials**

**75.5%**



**Invited clinical instructor**

(from the practicum facility)

**36.0%**



**XR (VR/AR/MR)**

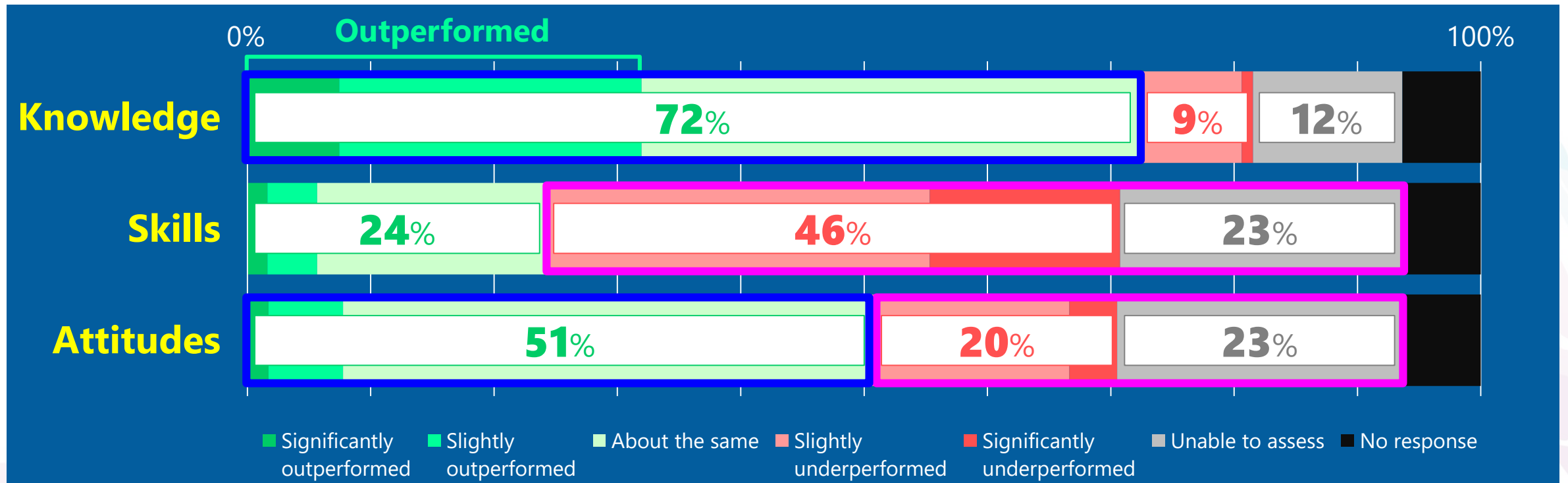
**10.5%**

Note: multiple choices allowed; n = 1,289

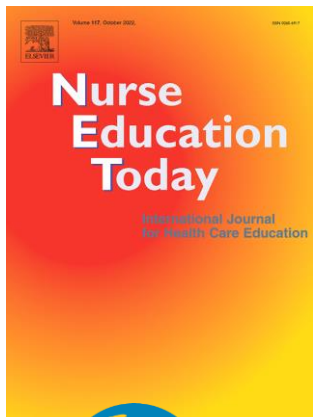
# Achievement of practicum goals

(if the on-site practicum was cancelled, postponed, or shortened)

Q. Compared to regular practicum (pre-pandemic), how well did the students achieve their practicum goals by implementing the alternative methods?



n = 1,289



Research article

## Nursing education in the pandemic: A cross-sectional international study

Study period: Dec 2020 to Feb 2021

Participants : 30 nursing educators working in establishments listed among the top 60 highest-ranked nursing schools in the world (according to the QS University Ranking)



### Global nursing educators' views on distance education during the pandemic:

**40%** said that distance education had positively affected students' theoretical knowledge

**8%** said that distance education had contributed to students' professional practical skills

**65%** believed they had been caught unprepared for the outbreak

## How clinical practicum was affected by the early stages of the pandemic

# Report: Survey on the impact of COVID-19 on nursing clinical practicum in FY2020 (published April 2021)



Quality Improvement Committee for Nursing Education  
Japan Association of Nursing Programs in Universities (JANPU)

## What we have learned & implications for the future

# Report: Maintenance and improvement of the quality of education in clinical practicum at universities with nursing programs (published June 2021)



**MEXT** MINISTRY OF EDUCATION,  
CULTURE, SPORTS,  
SCIENCE AND TECHNOLOGY-JAPAN

Expert panel seeking ideal form of clinical practicum at universities with nursing programs under the new coronavirus pandemic

日本看護系大学協議会 看護学教育質向上委員会  
2020年度 COVID-19に伴う看護学実習への影響調査  
A調査・B調査報告書

2021年4月

新型コロナウイルス感染症下における看護系大学の  
臨床実習の在り方に関する有識者会議 報告書  
看護系大学における臨床実習の教育の質の維持・向上について

令和3年(2021年)6月8日



# 1 Try to secure opportunities for on-site practicum

With the restriction of on-site practicum, the necessity and significance of clinical exposure in acquiring practical nursing skills became clearer than ever

## Examples of things that can only be perceived on site:

- Smells and the atmosphere of a place using the five senses
- The reality of a person's life
- The anguish of healthcare professionals when ethical issues arise



## On-site practicum is an ideal place for students to:

- Create an image of working as a nursing professional
- Examine their own practical skills in various nursing situations
- Develop the fundamental skills of a working adult



# 2

## Maintain the quality of education if alternative methods of on-site practicum are used/applied

### **If the on-site practicum is partially-limited (e.g. shortened):**

- Preparation and reflection/feedback (i.e. before and after onsite practicum) are important to maximize learning from limited clinical exposure

### **If there is no on-site practicum:**

- Sufficiently prepare case study/scenario in collaboration with practicum facilities and clinical instructors in order to more realistically demonstrate aspects of clinical situations
- Create time-sensitive environments similar to clinical settings by devising the timing of presenting information to students

**+ Sharing experiences with practicum facilities and with other nursing educators to improve the quality of education**

### 3 Continue improving nursing educators' skills

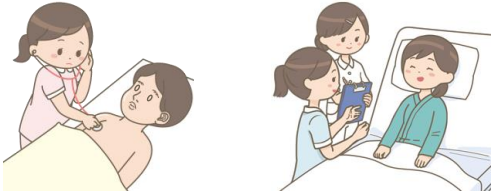
**Several teaching methods devised during the pandemic can enhance some aspects of learning gained from traditional on-site practicum (e.g. “knowledge”)**

However..

- Globally, most nursing educators had little or no experience in the development of curricula for online courses at the time of the outbreak (Nashwan et al., 2020)
- The effectiveness of remote education systems hastily improvised due to the pandemic was poor; such crisis-reactive remote education is less robust than conventional remote education (Al Lily et al. 2020; Aguilera-Hermida, 2020)

**Need to continue improving new/alternative teaching methods**

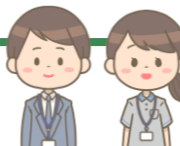
# 3 Continue improving nursing educators' skills



Experiential learning strategies  
(e.g. simulation, role play)

**Need to make an education environment closer to reality**

- Clinical situations in the scenario should be as **realistic** as possible
- Role players should be as much like **real** clients as possible

- 
- **Improving nursing educators' practical skills**
  - **Collaboratively developing educational materials with multiple educators who have different clinical experiences**
  - **The ability of educators to identify human resources** (e.g. inviting a local resident with recuperation experience as a mock client)
  - **Applying new technology** (e.g. VR, high-fidelity manikins)

# In conclusion

---

The advent of COVID-19 has required that nursing educators be innovative, flexible, nimble, and agile, but there have been challenges in enhancing skills and compensating for limited clinical exposure

**1 Try to secure opportunities for on-site practicum**

**2 Maintain the quality of education if alternative methods of on-site practicum are used/applied**

**3 Continue improving nursing educators' skills**

**It is imperative to do more research on student outcomes based on modifications made during the pandemic for future nursing education**